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1918																				
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CALENDAR

First Term, 1918-1919

Sept. 27,	Friday,	Entrance examinations begin.
Sept. 30,	Monday,	Instruction begins in the Medical College in New York City.
Oct. 7,	Monday,	Academic year begins. Registration of new students. Scholarship examinations begin.
Oct. 7,	Monday,	Registration of new students.
Oct. 9,	Wednesday,	Registration of old students.
Oct. 10,	Thursday,	Instruction begins in all departments of the University at Ithaca. President's annual address to the students at 12 m.
Oct. 12,	Saturday,	Registration, Graduate School.
Oct. 29,	Tuesday,	Last day for payment of tuition.
Nov. 6,	Wednesday,	Winter Courses in Agriculture begin.
Nov. 28,	Thursday,	Thanksgiving recess.
Dec. 21,	Saturday,	Latest date for announcing subjects of theses for advanced degrees in June.
Dec. 21,	Saturday,	Instruction ends.

Second Term, 1918-1919

Dec. 30,	Monday,	Registration, undergraduates.
Dec. 30,	Monday,	Registration, Graduate School.
Dec. 31,	Tuesday,	Instruction begins.
Jan. 20,	Monday,	Last day for payment of tuition.
Feb. 14,	Friday,	Winter Courses in Agriculture end.
Feb. 27,	Thursday,	The '94 Memorial Prize Competition.
Mar. 15,	Saturday,	The latest date for receiving applications for Fellowships and Scholarships in the Graduate School.
Mar. 21,	Friday,	Instruction ends.

Third Term, 1918-1919

Mar. 31,	Monday,	Registration, undergraduates.
Mar. 31,	Monday,	Registration, Graduate School.
Mar. 31,	Monday,	The latest date for presenting Woodford Orations.
April 1,	Tuesday,	Instruction begins.
April 21,	Monday,	Last day for payment of tuition.
May 2,	Friday,	The Woodford Prize Competition.
May 16,	Friday,	The '86 Memorial Prize Competition.
May 24,	Saturday,	Navy Day.
June 12,	Thursday,	Term examinations begin.
June 12,	Thursday,	Commencement of the Medical College in New York City.
June 23,	Monday,	Fifty-first Annual Commencement.
Aug. 1,	Friday,	Latest date for announcing subjects of theses for advanced degrees in February.

Summer Term (in the College of Agriculture) 1918-1919

June 24,	Tuesday,	Registration.
June 25,	Wednesday,	Instruction begins.
Sept. 13,	Saturday,	Term ends.

Summer Session, 1919

July 5,	Saturday,	Summer Session begins.
Aug. 15,	Friday,	Summer Session ends.

Summer School in Agriculture, 1919

July 5,	Saturday,	Summer School begins.
Aug. 15,	Friday,	Summer School ends.

CORNELL UNIVERSITY

FOUNDATION AND ENDOWMENT

"I would found an institution where any person can find instruction in any study."—EZRA CORNELL.

Cornell University was incorporated by the legislature of the State of New York on April 27, 1865, and to the University there were appropriated the proceeds of the sale of land scrip representing nine hundred and ninety thousand acres of public lands granted to the State in accordance with the provisions of an Act of Congress, approved on July 2, 1862. The amount realized from the State's sale of this land scrip was \$688,576.12.

Toward the endowment and maintenance of the new university, Ezra Cornell, at its foundation, donated \$500,000, and two hundred acres of land with useful buildings, along with several smaller gifts for special purposes.

A large portion of the land scrip sold by the State of New York was purchased by Ezra Cornell under contract providing that the profits derived from the sale of the lands should accrue to Cornell University. Under this contract of purchase, and by the wise administration of Ezra Cornell and the Board of Trustees through its Land Committee, of which Henry W. Sage was for many years chairman, Cornell University has up to July 1, 1918, realized \$5,047,863.39.

Cornell University was opened on October 7, 1868.

The lands and buildings and the equipment of the University have an estimated value of \$8,594,215.70. The productive and other funds of the University amount to \$15,736,594.84.

The current income of the University for the year 1917-1918 was \$3,204,418.01. Of this amount, \$519,014.60 consisted of tuition and laboratory fees; \$783,806.97 was appropriated by the State of New York for the College of Agriculture and the Veterinary College; the residue of \$1,901,596.44 came from general investments and from miscellaneous sources. Donations and gifts during the year amounted to \$117,732.64.

The total expenses of the University for the corresponding period were \$3,183,558.08. The salaries of members of the instructing staff amounted to \$1,038,278.76; departmental expenses were \$569,713.96.

A detailed statement of the finances of the University is included in the annual report of the Comptroller, which accompanies the Annual Report of the President; this may be had gratis on application to the Secretary of the University.

GOVERNMENT OF THE UNIVERSITY

The government of Cornell University is vested in a President elected by the Board of Trustees, and a Board of Trustees, consisting of the President of the University and forty-two other members, of whom seven are ex-officio, viz.: the Governor of the State of New York, the Lieutenant-Governor, the Speaker of the Assembly, the Commissioner of Education, the Commissioner of Agri-

culture, the President of the State Agricultural Society, and the Librarian of the Cornell Library. The eldest lineal male descendant of Ezra Cornell is a trustee during his life. Of the remaining thirty-four members, fifteen are elected by co-optation for a term of five years, ten are elected by the alumni of Cornell University to serve for five years, five are appointed by the Governor of the State of New York for the same term of service, three are elected by the University Faculty for terms of one, two, and three years, and one is annually elected by the State Grange.

BOARD OF TRUSTEES

The President of the University.....	J. G. Schurman, Ithaca
The Governor of New York.....	Alfred E. Smith, Albany
The Lieutenant Governor.....	Harry C. Walker, Albany
The Speaker of the Assembly.....	Thaddeus C. Sweet, Albany
The Commissioner of Education.....	John H. Finley, Albany
The Commissioner of Agriculture.....	Charles S. Wilson, Albany
The President of the State Agr. Society.....	C. Fred Boshart, Lowville
The Librarian of the Cornell Library (City).....	Ebenezer T. Turner, Ithaca
Charles Ezra Cornell.....	Ithaca
*Charles H. Blood (B)...	Ithaca
*C. Sidney Shepard (B)...	New Haven, Oswego Co., N. Y.
*Henry W. Sackett..... (B)...	Tribune Bldg., New York City
*Ira A. Place (A)...	Grand Central Terminal, N. Y. C.
*George J. Tansey (A)...	1618 Boatman's B'k Bldg., St. Louis, Mo.
*John A. Dix..... (G)...	Thomson, N. Y.
Henry R. Ickelheimer ... (B)...	Box 754, City Hall Station, New York
..... (B).....	
Charles M. Schwab (B)...	111 Broadway, New York City
Henry J. Patten (A)	111 W. Jackson Blvd., Chicago
..... (A).....	
Horace White (G)...	White Memorial Bldg., Syracuse
Andrew Carnegie (B)...	2 East 91st St., New York
Walter P. Cooke (B)...	Marine Bank Bldg., Buffalo
Frank H. Hiscock..... (B)...	Court House, Syracuse
Herbert D. Mason (A)...	903 Gallais Bldg., Tulsa, Okla.
James H. Edwards (A)...	30 Church St., New York City
Frank H. Miller (G)...	146 West 54th St., New York
Jared T. Newman (B)...	Ithaca
Mynderse Van Cleef (B)...	Ithaca
Robert H. Treman (B)...	Ithaca
John C. Westervelt (A)...	36 West 34th St., New York
Mrs. Harriet T. Moody.. (A)...	2970 Ellis Ave., Chicago
Thomas B. Wilson (G)...	Hall
Henry H. Westinghouse . (B)...	165 Broadway, New York City
Charles E. Treman..... (B)...	Ithaca
Roger B. Williams (B)...	Ithaca

*Term of office expires in 1919, the next group of six in 1920, etc.; faculty representatives in 1921, 1920, 1919, respectively. B., elected by Board; A., elected by Alumni; G., appointed by Governor; F., elected by the Faculty; Gr., elected by State Grange for 1918-1919

John L. Senior	(A) . .	246 Wildwood Ave., Jackson, Mich.
Cuthbert W. Pound	(A) . .	Court of Appeals, Albany, N. Y.
J. Du Pratt White	(G) . .	14 Wall St., New York City
William F. Pratt	(Gr) . .	The Meadows, Batavia
Walter F. Willcox	(F) . .	Ithaca
Dexter S. Kimball	(F) . .	Ithaca
John H. Comstock	(F) . .	Ithaca

Emmons L. Williams, Comptroller of the University Morrill Hall, Ithaca
 Charles D. Bostwick, Treasurer of the University and Secretary of the Board
 of Trustees Morrill Hall, Ithaca

STANDING COMMITTEES OF THE BOARD OF TRUSTEES, 1918-1919

Committee on General Administration: Mynderse Van Cleef, Chairman, J. G. Schurman, Charles E. Cornell, Roger B. Williams, James H. Edwards, Thomas B. Wilson, H. H. Westinghouse, Charles E. Treman, Cuthbert W. Pound, Robert H. Treman, Herbert D. Mason.

Committee on Finance: Roger B. Williams, Chairman, J. G. Schurman, Ira A. Place, Robert H. Treman, H. R. Ickelheimer, C. Sidney Shepard.

Committee on Buildings and Grounds: James H. Edwards, Chairman, J. G. Schurman, John C. Westervelt, Henry W. Sackett, Charles H. Blood, J. DuPratt White, Walter P. Cooke.

Agricultural College Council: J. G. Schurman, Chairman, Thomas B. Wilson, Frank H. Miller, J. DuPratt White, John A. Dix, Horace White, C. Fred Boshart, Charles S. Wilson, William F. Pratt, Jared T. Newman, John C. Westervelt, Albert R. Mann, H. H. Wing, T. Lyttleton Lyon.

Medical College Council: J. G. Schurman, Chairman, Walter L. Niles, H. R. Ickelheimer, H. H. Westinghouse, Ira A. Place, Lewis A. Connor.

Veterinary College Council: J. G. Schurman, Chairman, Thomas B. Wilson, Frank H. Miller, J. DuPratt White, John A. Dix, Horace White, C. Fred Boshart, Charles S. Wilson, William F. Pratt, Jared T. Newman, John C. Westervelt, Veranus A. Moore, Pierre A. Fish.

CORNELL UNIVERSITY

1. **The University.** Cornell University comprehends the Graduate School; the College of Arts and Sciences; the College of Law; the Medical College (including the Medical College in New York City and the Ithaca Division of the Medical College); the New York State Veterinary College; the New York State College of Agriculture; the College of Architecture; the College of Civil Engineering; and the Sibley College of Mechanical Engineering and Mechanic Arts. The New York State College of Agriculture and the New York State Veterinary College are administered by Cornell University, and their work is organically connected with that of the University.

2. **The University Faculty.** The University Faculty consists of the President who is ex-officio the presiding officer, and the Professors and Assistant Professors in colleges and schools of the University, along with the Librarian, the Assistant Librarians, the Registrar, and the Secretary of the University. It is the function of the University Faculty to consider questions that concern more than one special faculty, questions of University policy, and questions relating to the administration of the discipline of the University.

3. **The Faculty of the Graduate School.** The Faculty of the Graduate School consists of the President, who is ex-officio the presiding officer, and all Professors and Assistant Professors who are actively engaged in supervising the work of graduate students as members of the special committees in charge of major and minor subjects. Instructors who hold the Doctor's degree are also eligible for membership on the special committees in charge of the work of graduate students.

4. **The College Faculties.** Each of the remaining faculties of the University is composed of the President, who is ex-officio the presiding officer, and all Professors, Assistant Professors, and Instructors who give instruction in the department or departments under the charge of that Faculty; but Instructors, with the exception of those who are appointed for a term of more than one year, have not the right to vote. Subject to the right of revision by the University Faculty on all matters affecting general University policy, it is the duty of each college Faculty to determine the entrance requirements for its own students; to prescribe and define courses of study for them; to determine the requirements for such degrees as are offered to students under its jurisdiction; to recommend to the Trustees such candidates for degrees as may have completed the respective requirements for those degrees; and in general to exercise jurisdiction over all other educational matters.

OFFICERS OF INSTRUCTION AND ADMINISTRATION

THE UNIVERSITY FACULTY AND THE SEPARATE FACULTIES

- Schurman, Jacob Gould, A.M., D.Sc., LL.D., President of the University, 1892.
Professor of Philosophy, 1886.
- Adams, Bristow, B.A., Professor of Extension, Information Service, 1914.
- Adams, Joseph Quincy, jr., A.B., A.M., Ph.D., Assistant Professor of English, 1909. Instructor, 1904.
- Albee, Ernest, A.B., Ph.D., Professor of Philosophy, 1907. (Absent on leave.)
Instructor, 1892; Assistant Professor, 1902.
- Albert, Calvin Dodge, M.E., Professor of Machine Design, 1916. (Absent on leave.)
Instructor, 1904; Assistant Professor of Machine Design, 1908.
- Alexander, William Pringle, Instructor in Entomology, 1918. Assistant, 1916.
- Allen, Arthur Augustus, A.B., A.M., Ph.D., Assistant Professor of Ornithology, 1915. Assistant in Neurology and Vertebrate Zoology, 1906-07; Instructor, 1909, Instructor in Zoology, 1912.
- Allen, Charles Loring, A.B., Instructor in Animal Husbandry, 1918. Assistant, 1916.
- Anderson, Ernest Gustaf, B.Sc.A., Instructor in Plant Breeding, 1918. Assistant, 1915.
- Anderson, J. Norma, B.S., Instructor in Plant Pathology, 1918.
- Anderson, Ross Peter, A.B., Ph.D., Assistant Professor of Chemistry, 1914. (Absent on leave.) Assistant, 1907; Instructor, 1911.
- Andrews, Albert LeRoy, A.B., A.M., Ph.D., Assistant Professor of German, 1918. Instructor in German and Scandinavian, 1909.
- Andrews, Eugene Plumb, A.B., Assistant Professor of Archaeology and Curator of the Museum of Casts, 1911. Curator, 1897; Instructor, 1900.
- Asmus, Henry, Assistant Professor of Farriery, 1914.
- Atkinson, Ruth V., Instructor in Physical Education, 1917. Assistant, 1916.
- Auer, Johannes Abraham Christoffel Fagginger, B.D., Instructor in the Romance Languages, 1918.
- Austen, Willard, Librarian, 1915. Assistant Librarian, 1892.
- Bailey, Harold Capron, M.D., Instructor in Obstetrics, 1910. New York City. Clinical Instructor in Surgery, 1906; Instructor in Pharmacology, 1907.
- Baker, William Charles, B.S.A., Professor of Drawing in the College of Agriculture, 1914. Instructor in Drawing in Sibley College, 1897-1904; Instructor in Outdoor Art in the College of Agriculture, 1905-06; Assistant Professor of Drawing, 1907.
- Ballard, William Cyrus, jr., M.E., Assistant Professor of Electrical Engineering, 1917. Instructor in Machine Design, 1910; Instructor in Electrical Engineering, 1911.
- Bancroft, Wilder Dwight, A.B., Ph.D., Professor of Physical Chemistry, 1903. (Absent on leave.) Assistant Professor, 1895.
- Banner, Erford Lynn, B.S., Instructor in Poultry Husbandry, 1918. Assistant, 1915.
- Barker, Elmer Eugene, A.B., Ph.D., Assistant Professor of Plant Breeding, 1914. Assistant in Geology, 1910; Assistant in Entomology, 1910-11; Assistant in Plant Breeding, 1913; Instructor, 1913.
- Barnard, William Nichols, M.E., Professor of Power Engineering, 1915. (Absent on leave.) Assistant in Machine Design, 1897; Instructor, 1898-1900; Assistant Professor, 1903; Assistant Professor of Steam Engineering, 1905; Professor, 1907.
- Barnes, Fred Asa, C.E., M.C.E., Professor of Railroad Engineering, 1915. Instructor in Civil Engineering, 1902; Assistant Professor of Railroad Engineering, 1905.
- Barr, David Preswick, A.B., M.D., Instructor in Medicine, 1916. New York City.

- Barringer, Benjamin Stockwell, B.S., M.D., Clinical Instructor in Surgery, Department of Urology, 1914. New York City. Assistant, 1906-07.
- Barrows, David Nye, M.D., Instructor in Clinical Surgery, Department of Gynecology, 1916. New York City. Assistant in Clinical Surgery, Department of Gynecology, 1916.
- Barrus, Mortier Franklin, B.A., Ph.D., Extension Professor of Plant Pathology, 1914. (Absent on leave.) Assistant, 1908; Assistant Professor, 1911.
- Barton, Frank Arthur, M.E. in E.E., Professor of Military Science and Tactics, 1917. (Absent on leave, first term.)
Professor of Military Science and Tactics, 1904-1908.
- Bason, George Francis, B.E., M.E., Instructor in Electrical Engineering, 1916.
- Baxter, Hubert E., B.Arch., Instructor in Architecture, 1911. (Absent on leave.)
- Beal, Alvin Casey, B.S., M.S. in Agr.; Ph.D., Professor of Floriculture, 1913. Assistant, 1910; Assistant Professor, 1911.
- Bechtel, Albert Reiff, B.S., A.M., Instructor in Botany, 1915.
- Becker, Carl, B.Litt., Professor of Modern European History, 1917. (Absent on leave, first term.)
- Bedell, Frederic, A.B., Ph.D., Professor of Applied Electricity, 1904.
Instructor in Physics, 1892; Assistant Professor, 1893.
- Benedict, Stanley R., Ph.D., Professor of Chemistry, 1912. New York City. Assistant Professor, 1910.
- Benjamin Earl Whitney, B.S. in Agr., M.S. in Agr., Ph.D., Assistant Professor of Poultry Husbandry, 1914. Assistant, 1910; Instructor, 1911.
- Bennett, Charles Edwin, A.B., Litt.D., Goldwin Smith Professor of Latin, 1912. Professor, 1892.
- Benson, John Phinneas, B.S., Instructor in Botany, 1915.
- Bentley, John, jr., B.S., M.F., Professor of Forest Engineering, 1918. (Absent on leave, first term.) Assistant Professor of Forestry, 1911.
- Betten, Cornelius, M.A., Ph.D., Professor, Secretary and Registrar, College of Agriculture, 1915.
- Bidwell, Charles Clarence, A.B., Ph.D., Assistant Professor of Physics, 1917. (Absent on leave, first term.) Assistant, 1910; Instructor, 1912-14, 1915-17.
- Birch, Raymond Russell, B.S., D.V.M., Ph.D., Assistant Professor and Superintendent of the Veterinary Experiment Station, 1916. Assistant, 1910; Instructor in Experimental Pathology, 1910; Instructor in charge of Station, 1911; Superintendent of Station, 1914.
- Bizzell, James Adrian, B.S., M.S., Ph.D., Professor of Soil Technology in the College of Agriculture and Federal Experiment Station, 1912. Assistant Chemist, 1903; Assistant Professor of Soil Technology in the Federal Experiment Station, 1908.
- Blackmore, Beulah, B.S., Assistant Professor of Home Economics, 1917. Instructor, 1915.
- Blaker, Ernest, B.S., Ph.D., Assistant Professor of Physics, 1903. (Absent on leave.) Assistant, 1898; Instructor, 1901.
- Böck, Carl William, A.B., A.M., Ph.D., Instructor in Psychology, 1918.
- Bodansky, Aaron, B.S., Instructor in Biochemistry, 1917. Assistant, 1916.
- Boesche, Albert Wilhelm, A.B., Ph.D., Professor of German, 1915. Instructor, 1905-06; Assistant Professor, 1910.
- Bogert, George Gleason, A.B., LL.B., Professor of Law, 1916. (Absent on leave.) Assistant in American History, 1906-08; Acting Assistant Professor of Law, 1911; Assistant Professor of Law, 1913.
- Boys, Jessie Austin, B.S., Instructor in Home Economics, 1917.
- Bradford, Louis Jacquelin, B.S., Instructor in Machine Design, 1912.
- Bradley, James Chester, A.B., M.S., Ph.D., Assistant Professor of Systematic Entomology, 1911. Assistant, 1905-09.
- Bradley, Jesse Franklin, A.B., Instructor in English, 1916.

- Brannon, James Marshall, B.A., A.M., Instructor in Botany in the New York State College of Agriculture, 1915.
- Brauner, Olaf Martinus, Professor of Drawing and Painting in the College of Architecture, 1909. Instructor, 1895; Assistant Professor, 1898.
- Bretz, Julian Pleasant, A.B., Ph.D., Professor of American History, 1910. Assistant Professor, 1908.
- Brewer, Sarah Lucile, B.S., Assistant Professor of Home Economics, 1918. Instructor in Home Economics, 1916.
- Briggs, Thomas Roland, A.B., Ph.D., Assistant Professor of Physical Chemistry and Electrochemistry, 1915. Assistant, 1909-1912.
- Brink, Charles G., M.D., Instructor in Clinical Medicine, 1918. New York City.
- Bristol, George Prentice, A.B., A.M., Professor of Greek, 1898. Assistant Professor, 1888; Associate Professor, 1890; Director of the School of Education, 1910-16; Director of the Summer Session, 1905-1918.
- Broughton, Leslie Nathan, A.B., A.M., Ph.D., Assistant Professor of English, 1916. Instructor, 1910.
- Browne, Arthur Wesley, B.S., M.S., Ph.D., Professor of Inorganic and Analytical Chemistry, 1910. Instructor, 1903; Assistant Professor, 1906.
- Brundage, Walter H., M.D., Instructor in Medicine, 1917. New York City. Assistant, 1915.
- Buckman, Harry Oliver, M.S.A., Ph.D., Professor of Soil Technology, 1917. Assistant, 1910; Instructor, 1912; Assistant Professor, 1912.
- Bulkley, Kenneth, M.D., Instructor in Clinical Surgery, 1915. New York City. (Absent on leave.)
- Bundy, Murray Wright, A.B., A.M., Instructor in English, 1914.
- Burbank, Reginald, M.D., Instructor in Clinical Pathology, 1917. New York City.
- Burdick, Charles Kellogg, A.B., LL.B., Professor of Law, 1914. (Absent on leave, first term.)
- Burnham, LeRoy P., S.B., M.S. in Arch., Assistant Professor of Architecture, 1914.
- Burr, George Lincoln, A.B., LL.D., Litt.D., Librarian President White Library 1890; Professor of Medieval History, 1902. Instructor in Modern History, 1881-84; Instructor in Anglo-Saxon, 1886-87; Instructor in Medieval and Modern History, 1888; Assistant Professor of History, 1889; Assistant Professor of Ancient and Medieval History, 1890; Associate Professor, 1891; Professor, 1892.
- Burritt, Maurice Chase, B.S. in Agr., M.S.A., Vice-Director of Extension and Professor of Extension Teaching, 1917. Extension Professor and State Director of Farm Bureaus, 1914.
- Burrows, Earle Nelson, C.E., M.C.E., Assistant Professor of Bridge Engineering, 1915. Instructor in Civil Engineering, 1910.
- Butler, Ethan F., M.D., Instructor in Military Surgery, 1918. New York City.
- Campbell, Alan Ditchfield, A.M., Instructor in Mathematics, 1918.
- Campbell, Robert Argyll, A.B., Lecturer in Economics, 1915.
- Canfield, Ellen Brainard, Instructor in Physical Education, 1917. Instructor in Physical Training, 1894.
- Carpenter, Charles Milton, D.V.M., Assistant Professor of Diagnosis, Veterinary College, 1918. Instructor in Obstetrics, 1917.
- Carpenter, Rolla Clinton, M.S., C.E., M.M.E., LL.D., Emeritus Professor of Experimental Engineering, 1917. Associate Professor, 1890; Professor, 1895.
- Carver, Walter Buckingham, Ph.B., Ph.D., Assistant Professor of Mathematics, 1910. Instructor, 1906.
- Cavanaugh, George Walter, B.S., Professor of Chemistry in its Relations to Agriculture, 1909. Assistant, 1891; Assistant Professor, 1903.
- Cecil, Russell L., Instructor in Medicine and Assistant in Clinical Pathology, 1916. New York City.

- Chamberlain, George Ray, M.E., Assistant Professor of Freehand Drawing in the College of Architecture, 1915. Instructor in Industrial Drawing and Art, 1902-04; Instructor in Freehand Drawing in the College of Architecture, 1906.
- Chamberlain, Robert Franklin, M.E., Instructor in Electrical Engineering, 1911.
- Chambers, Robert, jr., M.D., Instructor in Anatomy, 1916. New York City. Assistant, 1915.
- Chamot, Emile Monnin, B.S., Ph.D., Professor of Chemical Microscopy and Sanitary Chemistry, 1910. Assistant, 1890; Instructor, 1891; Assistant Professor, 1901.
- Chandler, Bernard Albert, B.S., M.S., Assistant Professor of Forest Utilization, 1917.
- Chandler, William Henry, B.S. in Agr., M.S. in Agr., Ph.D., Professor of Pomology, 1916. Professor of Research in Pomology, 1913.
- Cheney, Clarence O., M.D., Clinical Instructor in Medicine, Department of Psychiatry, 1917. New York City.
- Child, Clement D., A.B., Acting Professor of Physics, 1918. Assistant, 1893-94; Instructor, 1894-98.
- Church, Irving Porter, B.C.E., C.E., Emeritus Professor of Applied Mechanics and Hydraulics, 1916. Assistant Professor of Civil Engineering, 1876; Associate Professor, 1891; Professor of Applied Mechanics and Hydraulics, 1892-1916.
- Cilley, Arthur H., M.D., Clinical Instructor in Surgery, Department of Orthopedics, 1913. New York City.
- Claassen, Peter Walter, A.B., A.M., Instructor in Natural History, 1917. Assistant in Entomology, 1915.
- Coca, Arthur F., M.D., Instructor in Immunology, 1917. New York City. Instructor in Experimental Pathology, 1911; Instructor in Pathology, 1915.
- Cole, Lewis G., M.D., Professor of Roentgenology, 1913. New York City. Instructor, 1911.
- Coley, William B., A.B., A.M., M.D., Professor of Clinical Surgery, Department of Surgery, 1909. New York City.
- Collins, Jacob Roland, B.S., M.S., Instructor in Physics, 1918.
- Comstock, Anna Botsford, B.S., Assistant Professor of Nature-Study, 1913. Assistant in Nature-Studies, 1897; Lecturer in Nature-Study, 1903; Lecturer Extension Teaching, 1906; Lecturer in Nature-Study, 1907.
- Comstock, John Henry, B.S., Emeritus Professor of Entomology, and General Invertebrate Zoology, 1914. Instructor in Entomology, 1873; Assistant Professor, 1876; Professor, 1882.
- Conner, Lewis Atterbury, Ph.B., M.D., Professor of Medicine, 1916. New York City. Instructor, 1898; Professor of Clinical Medicine, 1900.
- Conwell, Walter Lichtenthaeler, C.E., Assistant Professor of Railroad Engineering, 1915. (Absent on leave.) Instructor in Civil Engineering, 1911.
- Cooper, Lane, A.B., A.M., Ph.D., Professor of the English Language and Literature, 1915. Instructor in English, 1902; Assistant Professor, 1906.
- Cornell, Walter Rodney, B.S., Instructor in Mechanics of Engineering, 1910. Instructor in Civil Engineering, 1909.
- Cornell, William Bouck, M.E., Instructor in Machine Design, 1918. Instructor in Civil Engineering, 1908-09; Instructor in Machine Design, 1910-11.
- Cowan, Ralph Waldo Emerson, B.S., Instructor in Dairy Industry, 1918. Assistant, 1916.
- Craig, Clyde Firman, A.B., Ph.D., Assistant Professor of Mathematics, 1915. Assistant, 1906; Instructor, 1907.
- Crandall, Carl, C.E., Instructor in Civil Engineering, 1913. (Absent on leave.)
- Crane, Thomas Frederick, A.B., A.M., Ph.D., Litt.D., Emeritus Professor of the Romance Languages and Literatures, 1909. Assistant Professor of South European Languages, 1868; Professor of Italian and Spanish, 1873; Professor of the Romance Languages and Literatures, 1881. Dean of the Faculty of Arts and Sciences, 1896-1902; Acting President of the University, 1899-1900; 1912-1913; Dean of the University Faculty, 1901.

- Creighton, James Edwin, A.B., Ph.D., LL.D., Sage Professor of Logic and Metaphysics, 1895. Dean of the Graduate School, 1914.
Instructor in Philosophy, 1889; Associate Professor of Modern Philosophy, 1892.
- Crosby, Cyrus Richard, A.B., Extension Professor of Entomology, 1913. (Absent on leave, first term.)
Entomologist, 1906; Assistant Professor of Entomological Investigations, 1909.
- Crosby, Dick J., B.S., M.S., Professor in Extension Service, 1917. Professor of Extension Teaching, 1915.
- Cross, Lewis Josephus, A.B., Ph.D., Professor of Chemistry in its Relations to Agriculture, 1914.
Assistant in Chemistry, 1908; Instructor in Agricultural Chemistry, 1909; Assistant Professor, 1912.
- Currier, Louis Wade, S.B., Instructor in Economic Geology, 1918.
- Curtis, Otis Freeman, M.S., Assistant Professor of Botany, 1917. Assistant in the Farm Course, 1912; Instructor in Botany, 1913.
- Curtis, Ralph Wright, B.S.A., M.S.A., Professor of Landscape Art, 1916.
Assistant in Nature-Study, 1905-06; Assistant Professor, 1913.
- Curtiss, Leon Francis, A.B., Instructor in Physics, 1918.
- Dana, Charles Loomis, A.M., M.D., Professor of Clinical Medicine, Department of Neurology, 1898. New York City.
- Dann, Hollis Ellsworth, Mus.D., Professor of Music, 1907. (Absent on leave, first and second terms.) Instructor, 1903; Assistant Professor, 1904.
- Davenport, Herbert Joseph, Ph.B., Ph.D., Professor of Economics, 1916.
- Davis, E. Gorton, B.S., Professor of Landscape Art, 1916. Assistant Professor of Rural Art, 1911; Assistant Professor of Landscape Art, 1912.
- DeGarmo, Charles, Ph.D., Emeritus Professor of the Science and Art of Education, 1914. Professor, 1898; Dean of the Summer Session, 1898-1905.
- Dennis, Frederick Shepard, A.B., M.D., F.R.C.S., Emeritus Professor of Clinical Surgery, 1910. New York City. Professor, 1898.
- Dennis, Louis Munroe, Ph.B., B.S., Professor of Inorganic Chemistry, 1903.
Instructor in Chemistry, 1887-89; Assistant Professor of Analytical Chemistry, 1891; Associate Professor, 1894; Professor, 1900.
- Diederichs, Herman, M.E., Professor of Experimental Engineering, 1907; in Charge of the Mechanical Laboratory, 1910.
Assistant, 1898; Instructor, 1899; Assistant Professor, 1902.
- Douglas, Gertrude Elizabeth, A.B., A.M., Ph.D., Instructor in Botany, 1917.
- Downs, Paul Andrew, B.S., Instructor in Dairy Industry, 1918.
- Drummond, Alexander M., A.B., A.M., Assistant Professor of Public Speaking, 1916. (Absent on leave.) Instructor, 1907.
- DuBois, Eugene F., M.D., Assistant Professor of Medicine, 1917. New York City. Instructor in Applied Pharmacology, 1910; and Lecturer in Clinical Physiology, 1913.
- DuBois, Phebe L., M.D., Instructor in Clinical Medicine, 1918. New York City.
- Durham, Charles Love, M.A., Ph.D., Professor of Latin, 1909.
Instructor, 1897; Assistant Professor, 1901.
- Dynes, Oliver Wesley, B.S., M.S. in Agr., Instructor in Farm Crops, 1914.
Assistant, 1910-11.
- Eames, Arthur Johnson, A.B., A.M., Ph.D., Assistant Professor of Botany in the College of Agriculture, 1914. Instructor, 1912.
- Edgar, James Clifton, Ph.B., A.M., M.D., Professor of Obstetrics and Clinical Midwifery, 1898. New York City.
- Edgerton, Henry White, A.B., LL.B., Assistant Professor of Law, 1917.
Acting Assistant Professor of Law, 1916.
- Edwards, D. J., Ph.D., Instructor in Physiology, 1918. New York City.
- Eggleston, Cary, M.D., Assistant Professor of Pharmacology, 1918. New York City. Instructor, 1911.

- Ellenwood, Frank Oakes, A.B., Professor of Power Engineering, 1916. (Absent on leave.) Acting Assistant Professor, 1911; Assistant Professor, 1912.
- Elliott, George Thomson, A.B., M.D., Professor of Clinical Medicine, Department of Dermatology, 1898. New York City.
- Elmer, Herbert Charles, A.B., Ph.D., Professor of Latin, 1909. Acting Assistant Professor, 1888; Assistant Professor, 1890.
- Elser, William James, M.D., Professor of Bacteriology, 1909. New York City. Assistant in Pathology, 1901; Instructor in Bacteriology, 1904; Assistant Professor, 1908.
- Elston, Ellsworth David, A.B., A.M., Instructor in Physical Geography, 1913. Assistant, 1912.
- Emboly, George Charles, B.S., M.S., Ph.D., Assistant Professor of Aquiculture, 1912. Instructor in Neurology and Vertebrate Zoology, 1909-10; Instructor in Aquiculture, 1911.
- Emerson, Rollin Adams, B.Sc., D.Sc., Professor of Plant Breeding, 1914.
- Engeln, Oscar Diederich von, A.B., Ph.D., Assistant Professor of Physical Geography, 1912. Assistant in Dynamic Geology, 1905; Instructor, 1907.
- English, Donald, B.S., M.B.A., Professor of Economics and Accounting, 1918. Acting Assistant Professor, 1914; Assistant Professor, 1915.
- Everett, George Abram, A.B., LL.B., Professor of Extension Teaching, 1915. (Absent on leave, first term.) Assistant in Elocution and Oratory, 1899-01; Instructor 1904; Assistant Professor, 1906-07; 1910-15.
- Ewing, James, A.M., M.D., Professor of Pathology, 1899. New York City.
- Fairbanks, Frank Latta, M.E., Instructor in Farm Mechanics, 1918. Assistant, 1917.
- Farrar, Lillian K. P., M.D., Instructor in Clinical Surgery, Department of Gynecology, 1916.
- Faust, Albert Bernhardt, A.B., Ph.D., Professor of German, 1910. Acting Assistant Professor, 1904; Assistant Professor, 1905.
- Fenner, L. A., Instructor in Machine Design, 1918.
- Ferguson, Jeremiah Sweetser, B.S., M.S., M.D., Secretary of the Medical Faculty, New York City, 1909. Instructor, 1898; Assistant Professor of Histology, 1908.
- Fippin, Elmer Otterbein, B.S. in Agr., Extension Professor of Soil Technology, 1911. Assistant Professor, 1905. Professor, 1909.
- Fish, Pierre Augustine, B.S., D.Sc., D.V.S., D.V.M., Professor of Veterinary Comparative Physiology and Pharmacology, 1902. (Absent on leave.) Instructor, 1890; Assistant Professor, 1896.
- Fisher, Clyde Olin, A.B., A.M., Instructor in Economics, 1917.
- Fisk, Walter Warner, B.S. in Agr., M.S. in Agr., Assistant Professor of Dairy Industry, 1913. Assistant 1910; Instructor, 1911.
- Fitzpatrick, Harry Morton, A.B., Ph.D., Assistant Professor of Plant Pathology, 1913. Assistant in Botany, 1908; Instructor in Plant Pathology, 1911.
- Foglesong, John Edward, B.A., M.A., Instructor in Chemistry, 1917. Assistant, 1916.
- Folsom, R. P., M.D., Clinical Instructor in Medicine, Department of Psychiatry, 1918. New York City.
- Forbes, W. T. M., Instructor in Biology, 1918. Assistant, 1915.
- Foster, William Silliman, A.B., Ph.D., Assistant Professor of Education, 1916. (Absent on leave.) Assistant 1909; Instructor in Psychology, 1913.
- Fraleigh, Percy Austin, Instructor in Mathematics, 1918. (Absent on leave.)
- Fraser, Allan Cameron, B.S., Ph.D., Instructor in Plant Breeding, 1914. (Absent on leave.) Assistant, 1913.
- Frink, Horace Westlake, M.D., Assistant Professor of Clinical Medicine, Department of Neurology, 1917. New York City. Instructor, 1914.
- Frost, James Nathan, D.V.M., Professor of Surgery, 1917. Assistant, 1907; Instructor, 1908; Assistant Professor, 1913.

- Furchgott, Hazel, Ph.B., Instructor in Physical Education, 1918. (Absent on leave.) Assistant, 1917.
- Gaehr, Paul, A.B., A.M., Ph.D., Acting Professor of Physics, 1918.
- Gage, Simon Henry, B.S., Emeritus Professor of Histology and Embryology, 1908. Instructor in Microscopy and Practical Physiology, 1877-80; Assistant Professor of Physiology, and Lecturer on Micro-Technology, 1881; Associate Professor, 1889; Associate Professor of Anatomy, Histology, and Embryology, 1893; Professor, 1895; Professor of Microscopy, Histology and Embryology, 1896; Professor of Histology and Embryology, 1902.
- Gage, Victor Raymond, M.E., M.M.E., Assistant Professor of Experimental Engineering, 1912. Instructor, 1907.
- Gamble, Dean Le Fever, B.S., Instructor in Zoology, 1917. Assistant, 1916.
- Garner, Enoch Francis, M.E., Instructor in Machine Design, 1913. Instructor, 1907-10.
- Garrett, Clara L., Instructor in Drawing, 1916.
- Garrett, Seymour Stanton, C.E., Assistant Professor of Mechanics of Engineering, 1910. (Absent on leave.) Instructor in Civil Engineering, 1906-08.
- George, Sidney Gonzales, C.E., Professor of Applied Mechanics, 1916. Instructor in Civil Engineering, 1905-07; Assistant Professor of Applied Mechanics, 1908.
- Georgia, Frederick Raymond, B.Chem., Instructor in Chemistry, 1915. (Absent on leave.) Assistant, 1914.
- Gere, James Belden, M.D., Instructor in Neuro-Pathology, 1917. New York City. Assistant, 1907.
- Gerster, John C. A., M.D., Instructor in Operative Surgery, 1914. New York City.
- Gibbs, Roswell Clifton, A.B., A.M., Ph.D., Professor of Physics, 1918. Assistant, 1906; Instructor, 1906; Assistant Professor, 1912.
- Gibson, Charles Langdon, A.B., M.D., Associate Professor of Surgery, 1917. New York City. Clinical Instructor in Diseases of the Genito-Urinary System, 1900; Instructor in Surgery, 1902; Professor of Clinical Surgery, 1906; Assistant Professor of Surgery, 1912.
- Gilbert, Allan H., A.B., Ph.D., Instructor in English, 1912.
- Gill, Adam Capen, A.B., Ph.D., Professor of Mineralogy and Petrography, 1910. Assistant Professor, 1894.
- Gillespie, David Clinton, A.B., M.A., Ph.D., Assistant Professor of Mathematics, 1911. Instructor, 1906.
- Gillett, Roy Lewis, B.S., Instructor in Farm Management, 1917.
- Gleason, Julia, Instructor in Home Economics, 1916.
- Goldberg, Samuel Alexander, D.V.M., A.M., Assistant Professor of Pathology, Veterinary College, 1917. Assistant, 1913.
- Goodridge, Malcolm, M.D., Assistant Professor of Therapeutics, 1916. New York City. Instructor, 1910.
- Graves, Lulu, Acting Assistant Professor of Home Economics, 1918.
- Gray, Alexander M., B.Sc., E.E., Professor of Electrical Engineering, 1915.
- Gregory, Charles Truman, B.S. in Agr., Ph.D., Assistant Professor of Plant Pathology, 1914. Assistant, 1911; Instructor, 1912.
- Gudernatsch, J. F., Ph.D., Assistant Professor of Anatomy, 1915. New York City. Instructor, 1909.
- Guerlac, Othon Goepp, Licencié ès lettres, M.A., LL.B., Assistant Professor of Romance Languages, 1904. (Absent on leave.) Instructor, 1900.
- Guise, Cedric Hay, B.S., M.F., Instructor in Forestry, 1915. (Absent on leave, first term.) Assistant, 1914.
- Guthrie, Edward Sewall, B.S.A., M.S.A., Ph.D., Professor of Dairy Industry, 1913. Instructor and Investigator in Dairy Industry, 1908.

- Gutsell, Hiram Samuel, B.P., A.M., Assistant Professor of Freehand Drawing in the College of Architecture, 1904. Instructor in Drawing and Industrial Art, 1888; Instructor in Freehand Drawing and Modeling, 1904.
- Hagan, William Arthur, D.V.M., Assistant Professor of Pathology and Bacteriology, 1918. Instructor in Department of Obstetrics and Research in the Diseases of Breeding Cattle, 1916; Instructor in Pathology and Bacteriology, 1916.
- Haines, George, B.S., M.S. in Agr., Instructor in Animal Husbandry, 1918. Assistant, 1917.
- Ham, Clarence Walter, B.M.E., M.E., Assistant Professor of Machine Design, 1914. (Absent on leave.) Instructor, 1907.
- Hamilton, George Livingstone, A.B., A.M., Ph.D., Professor of the Romance Languages and Literatures, 1916. Assistant Professor, 1911.
- Hammond, William Alexander, B.A., A.M., Ph.D., Sage Professor of Ancient Philosophy and of Aesthetics, 1908; Secretary of the University Faculty. Instructor in Greek Philosophy, 1891; Assistant Professor of Ancient and Medieval Philosophy, 1892; Assistant Professor of Ancient and Medieval Philosophy and Aesthetics, 1903.
- Hancy, Anna Jane, A.B., A.M., Instructor in Botany, 1917. Assistant, 1911-12, 1914-17.
- Hardenburg, Earle Volcart, B.S., M.S. in Agr., Instructor in Farm Crops, 1912.
- Harper, Merritt Wesley, B.Sc., M.S., Professor of Animal Husbandry, 1913. Assistant, 1905; Instructor, 1906; Assistant Professor, 1907.
- Harris, Gilbert Dennison, Ph.B., Professor of Paleontology and Stratigraphic Geology, 1909. Assistant Professor, 1894.
- Hartwell, John Augustus, Ph.B., M.D., Professor of Clinical Surgery, 1909, and Assistant Professor of Surgery, 1911. New York City. Instructor in Physiology, 1898; Assistant Professor, 1901.
- Haskell, Eugene Elwin, B.C.E., C.E., Dean of the College of Civil Engineering, and Professor of Experimental Hydraulics, 1906.
- Hastings, Thomas Wood, A.B., M.D., Professor of Clinical Pathology, 1907. New York City. Assistant, 1901; Instructor, 1903.
- Hatcher, Robert Anthony, Ph.G., M.D., Professor of Pharmacology, 1911. New York City. Instructor in Materia Medica, 1904; Assistant Professor of Pharmacology, 1906; Professor of Pharmacology, and Materia Medica, 1908.
- Hausman, Leon Augustus, A.B., Instructor in Meteorology, 1918. Assistant in Geology, 1912-14; Assistant in Meteorology, 1915.
- Hayden, Charles Ernest, A.B., D.V.M., Acting Professor of Physiology, Veterinary College, 1918. Assistant, 1909; Instructor, 1910; Assistant Professor of Physiology, 1914.
- Haynes, Irving Samuel, Ph.B., M.D., D.Sc., Professor of Applied Anatomy and Clinical Surgery, 1911. New York City. Professor of Practical Anatomy, 1898.
- Hazard, Blanche Evans, A.B., M.S., Assistant Professor of Home Economics, 1914.
- Heinecke, Arthur John, B.S.A., M.A., Ph.D., Assistant Professor of Pomology, 1917. Instructor, 1914.
- Hendrickson, Arthur Howard, B.S., Assistant Professor of Pomology, 1918.
- Henry, Mary Frances, A.B., Assistant Professor of Home Economics, 1918. Instructor, 1915.
- Herendeen, Ralph Eugene, M.D., Instructor in Roentgenology, 1918. New York City.
- Hermannsson, Halldor, Lecturer in German, 1912. Curator of Icelandic Collection in Library, 1906. Instructor in Scandinavian Languages, 1905.
- Herrick, Glenn Washington, B.S. in Agr., Professor of Economic Entomology, 1912. Assistant Professor, 1909.
- Hesler, Lexemuel Ray, A.B., Ph.D., Assistant Professor of Plant Pathology, 1914. Instructor, 1912.

- Heuser, Gustave Frederick, B.S., M.S. in Agr., Assistant Professor of Poultry Husbandry, 1918. Assistant, 1915; Instructor, 1917.
- Hewett, Waterman Thomas, A.B., Ph.D., Emeritus Professor of German, 1910. Assistant Professor of North European Languages, 1870; Professor of the German Language and Literature, 1883.
- Hitzrot, James Morley, A.B., M.D., Associate Professor of Clinical Surgery, 1917. New York City. Instructor, 1904; Assistant Professor, 1912.
- Hoag, Arthur E., M.D., Instructor in Surgery, 1912, and Clinical Instructor in Surgery, 1917. New York City.
- Hoguet, Joseph P., M.D., Instructor in Surgery, 1911. New York City.
- Hoisington, Louis Benjamin, A.B., Instructor in Education, 1917. Assistant in Psychology, 1917.
- Holland, Arthur L., Instructor in Clinical Medicine, Department of Medicine, 1915. New York City.
- Hopkins, Grant Sherman, B.S., D.Sc., D.V.M., Professor of Comparative Anatomy and Anatomical Methods, 1903. Assistant, 1889; Instructor, 1890; Assistant Professor, 1896.
- Hopper, Earle Budd, Instructor in Surgery, 1917.
- Hopper, Herbert Andrew, B.S.A., M.S., Extension Professor of Animal Husbandry, 1913. Assistant Professor, 1911.
- Hosmer, Ralph Sheldon, B.S.A., M.F., Professor of Forestry, 1914.
- Hotchkiss, Homer James, A.M., M.M.E., Instructor in Mechanics of Engineering, 1916. Instructor in Physics, 1891-1903.
- Howard, Robert C., M.D., Clinical Instructor in Surgery, Department of Laryngology and Rhinology, 1918. New York City.
- Howe, Harley Earl, B.S., M.A., Assistant Professor of Physics, 1918. Instructor, 1909-12.
- Howell, Eric Vail, C.E., M.C.E., Instructor in Civil Engineering, 1918.
- Howes, Horace Leonard, B.S., Instructor in Physics, 1918. Assistant, 1910-15.
- Hoy, David Fletcher, B.S., M.S., Registrar, 1895. Assistant Registrar, 1891.
- Hull, Charles Henry, Ph.B., Ph.D., Goldwin Smith Professor of American History, 1912. Instructor in Political and Social Institutions, 1892; Assistant Professor of Political Economy, 1893; Professor of American History, 1901; Dean of the Faculty of Arts and Sciences, 1908-13.
- Hunt, Everett Lee, A.B., Assistant Professor of Public Speaking, 1918.
- Huntoon, Frank McElroy, M.D., Assistant Professor of Bacteriology, 1909. New York City. Assistant, 1905; Instructor, 1909.
- Hurwitz, Wallie Abraham, Ph.D., Assistant Professor of Mathematics, 1914. Instructor, 1910.
- Hutchinson, John Irwin, A.B., Ph.D., Professor of Mathematics, 1910. Instructor, 1894; Assistant Professor, 1903.
- Hutchison, Claude Burton, B.S. in Agr., M.S. in Agr., Professor of Plant Breeding, 1916.
- Hyatt, James Mead, A.B., Instructor in Physics, 1918. Assistant, 1917.
- Irish, Shurly Russell, M.E., Instructor in Machine Design, 1917.
- Jackson, Henry Wirt, M.D., Instructor in Clinical Pathology, 1914. New York City. (Absent on leave.) Assistant, 1913.
- Jackson, Howard Campbell, B.S., Instructor in Dairy Industry, 1917. Assistant, 1915.
- Jackson, Stuart Deming, A.B., Instructor in Chemistry, 1917. Assistant, 1916.
- Jacoby, Henry Sylvester, C.E., Professor of Bridge Engineering, 1897. Assistant Professor, 1890; Associate Professor, 1894.
- Jagu, Fernand Désiré Anselme Ferdinand, Licencié en droit, Instructor in the Romance Languages, 1918.

- Jeck, Howard S., M.D., Clinical Instructor in Surgery, Department of Urology, 1917. New York City.
- Jenison, Nancy, M.D., Instructor in Medicine, 1917. New York City.
- Johannsen, Oskar Augustus, B.S., A.M., Ph.D., Professor of General Biology, 1915. Instructor in Civil Engineering, 1899; Assistant Professor, 1904-09; Assistant Professor of Biology, 1912; Professor of Entomology, 1914.
- Jones, Horace Leonard, A.B., A.M., Ph.D., LL.D., Assistant Professor of Greek, 1910. (Absent on leave.)
- Karapetoff, Vladimir, C.E., Professor of Electrical Engineering, 1908. Assistant Professor, 1904.
- Kelley, Frances Remington, B.A., Instructor in Home Economics, 1917.
- Keniston, Ralph Hayward, A.B., A.M., Ph.D., Assistant Professor of the Romance Languages and Literatures, 1914.
- Kennard, Earle Hesse, B.A., Ph.D., Assistant Professor of Physics, 1917. (Absent on leave.) Assistant, 1912; Instructor, 1916.
- Kennedy, Robert Foster, M.D., F.R.S.E., Associate Professor of Clinical Medicine, Department of Neurology, 1917. New York City. (Absent on leave.) Instructor, 1910; Assistant Professor, 1914.
- Kennell, Lester Spruce, A.B., M.A. Instructor in Romance Languages, 1917.
- Kent, Olney Brown, B.S., M.S. in Agr., Ph.D., Assistant Professor of Poultry Husbandry, 1917. Assistant, 1913; Instructor, 1913.
- Kenyon, James H., M.D., Instructor in Clinical Surgery, Department of Surgery, 1916. New York City. (Absent on leave.)
- Kerr, Abram Tucker, B.S., M.D., Professor of Anatomy, 1904, and Secretary of the Ithaca Division of the Medical College, 1902. Assistant Professor, 1900.
- Keyes, Edward Loughboro, jr., A.B., Ph.D., M.D., Professor of Clinical Surgery, Department of Urology, 1910. New York City. (Absent on leave.) Assistant, 1898; Instructor, 1899.
- Kimball, Dexter Simpson, A.B., M.E., Professor of Machine Design and Industrial Engineering, 1915. Assistant Professor, 1898-1901; Acting Director of Sibley College, second term, 1911-12; Professor of Machine Design and Construction, 1904; Acting Dean of Sibley College, 1917; Acting President, June 15-October 15, 1918.
- King, Asa Carlton, B.S.A., Professor of Farm Practice, 1915. Extension School Instructor, 1911.
- King, Edward Riley, B.S., Assistant Professor of Entomology, 1915. (Absent on leave.)
- Kingery, Hugh McMillan, B.A., M.A., Instructor in Histology and Embryology, 1914. (Absent on leave.) Assistant, 1912.
- Kingsbury, Benjamin Freeman, A.B., M.S., Ph.D., M.D., Professor of Histology and Embryology, 1908. Instructor, 1896; Assistant Professor, 1899; Assistant Professor of Physiology, Medical College, 1902.
- Kinnear, Helen, Instructor in Physical Education, 1918.
- Kirby, George Hughes, B.S., M.D., Professor of Clinical Medicine, Department of Psychiatry, 1917. New York City. Instructor, 1905-1912.
- Kirkland, Joseph Brackin, B.S., Instructor in Farm Practice, 1918.
- Knudson, Lewis, B.S.A., Ph.D., Professor of Botany, 1916. Assistant in Plant Physiology, 1908; Instructor, 1908; Assistant Professor, 1911.
- Kruse, Paul J., A.B., A.M., Ph.D., Assistant Professor of Rural Education, 1917.
- Lambert, Alexander, A.B., Ph.B., M.D., Professor of Clinical Medicine, Department of Medicine, 1898. New York City. (Absent on leave.)
- Larkin, Leo Paul, A.B., Instructor in Physics, 1918. Assistant, 1916.
- Lauman, George Nieman, B.S.A., Professor of Rural Economy, 1909. Assistant in Horticulture, 1897; Instructor, 1899; Instructor in Rural Economy, 1903; Assistant Professor, 1905.

- Law, James, F.R.C.V.S., Emeritus Professor of the Principles and Practice of Veterinary Medicine, 1908.
Professor of Veterinary Medicine and Surgery, 1868; Professor of the Principles and Practice of Veterinary Medicine, Veterinary Science, and Veterinary Therapeutics, 1896; Director of New York State Veterinary College and Dean of Faculty of Veterinary Medicine, 1896.
- Lawrence, Leonard Alexander, B.S., Assistant Professor of Surveying, 1916. (Absent on leave.) Instructor in Civil Engineering, 1907.
- Lee, Burton James, A.B., Ph.B., M.D., Professor of Clinical Surgery, 1918. New York City. Assistant Demonstrator, 1903; Demonstrator, 1904; Instructor in Clinical Surgery, 1909, and in Surgical Pathology, 1913; Assistant Professor, 1916.
- Lee, Myron A., M.E., M.M.E., Assistant Professor in Machine Design, 1916. Instructor, 1910.
- Leland, Ora Miner, B.S. (C.E.), Professor of Astronomy and Geodesy, 1916. (Absent on leave.) Instructor in Civil Engineering, 1903; Assistant Professor, 1906.
- L'Esperance, Elise S., M.D., Instructor in Pathology, 1911. New York City. Assistant, 1910.
- Lilienthal, Howard, Professor of Clinical Surgery, Department of Surgery, 1917. New York City. (Absent on leave.)
- Livermore, Kenneth Carter, B.S. in Agr., M.S. in Agr., Professor of Farm Management, 1913.
Instructor in Farm Crops, 1909; Instructor and Investigator, 1910; Assistant Professor of Farm Management, 1911.
- Lloyd, John Thomas, A.B., Instructor in Entomology, 1918. Assistant, 1909.
- Love, Harry Houser, B.S., M.A., Ph.D., Professor of Plant Breeding, 1917. Assistant, 1908; Assistant Professor of Plant Breeding in the Federal Experiment Station, 1909; Professor of Plant Breeding Investigations, 1912.
- Lukens, Earl Gibson, A.B., Instructor in Animal Husbandry, 1918.
- Lumsden, David, Graduate of Sleaford Collegiate Academy, 1884-1888; Veitchian School of Horticulture, 1888-1892; special studies at the Royal Botanic Garden (Kew); F.R.H.S. (Hon.), Assistant Professor of Floriculture, 1914.
- Lusk, Graham, Ph.D., Sc.D., F.R.S. (Edin.), M.D., Professor of Physiology, 1909. New York City.
- Lusk, William Foster, B.Ph., M.S.A., Professor of Rural Education, 1917.
- Lyon, Thomas Lyttleton, B.S. in Agr., Ph.D., Professor of Soil Technology in the Federal Experiment Station, 1906.
- McAnlis, Chauncy Ruthven, B.S. in C.E., C.E., Instructor in Civil Engineering, 1915.
- McAuliffe, George Birmingham, A.B., M.D., Clinical Instructor in Surgery, Department of Otology, 1904. New York City.
- McCaskill, Oliver Leroy, Ph.B., LL.D., Professor of Procedure, 1916.
- McCurdy, John Clarence, B.S., C.E., Assistant Professor of Rural Engineering, 1916. Instructor in Civil Engineering, 1907; Instructor in Rural Engineering, 1915.
- McCurdy, John T., M.D., Lecturer on Clinical Medicine, Department of Psychiatry, 1917. New York City. Clinical Instructor in Medicine, Department of Psychopathology, 1913.
- McDermott, George Robert, Professor of Structural Design, 1909.
Assistant Professor of Naval Architecture, 1892; Professor, 1905.
- McGrath, John F., M.D., Instructor in Clinical Surgery, Department of Gynecology, 1918.
- McInerney, Thomas Joseph, B.S. in Agr., M.S. in Agr., Assistant Professor of Dairy Industry, 1917. Assistant, 1910; Instructor and Investigator, 1912.
- McKelvey, Joseph Vance, A.B., A.M., Ph.D., Instructor in Mathematics, 1909. (Absent on leave.)

- McMahon, James, A.B., A.M., D.Sc., Professor of Mathematics, 1904.
Instructor, 1884; Assistant Professor, 1890.
- McVetty, Percy George, M.E., Instructor in Engineering Research, 1914. (Absent on leave.) Instructor in Mechanical Laboratory, 1913.
- Maddren, Russell F., Instructor in Hygiene, 1918. New York City.
- Mann, Albert Russell, B.S.A., A.M., Professor of Rural Social Organization, 1915; Dean of the College of Agriculture, Director of the Experiment Station, and Director of Extension Service, 1917.
Assistant Professor of Dairy Industry, 1908; Assistant to Director and Editor, 1908; Secretary of the College of Agriculture, 1909; Secretary, Registrar, and Professor of Agricultural Editing, 1910; Acting Dean of the College of Agriculture and Acting Director of the Experiment Station, 1916.
- Martin, Clarence Augustine, D.Sc., Professor of Architecture, 1904, and Dean of the College of Architecture, 1908. Instructor, 1894; Assistant Professor, 1895.
- Mason, James Frederick, A.B., Ph.D., Professor of the Romance Languages, 1914.
Instructor, 1909; Assistant Professor, 1912.
- Massey, Louis Melville, A.B., Ph.D., Assistant Professor of Plant Pathology, 1917. (Absent on leave.) Instructor, 1914.
- Matheson, Robert, B.S.A., M.S. in Agr., Ph.D., Assistant Professor of Economic Entomology, 1915; Assistant Entomologist of the Experiment Station, 1917.
Assistant in Entomology, 1909; Assistant in Biology, 1910; Instructor, 1911; Assistant Professor, 1912; Investigator in Entomology, 1913; Assistant Professor of Entomology, 1914.
- Matthews, Robertson, M.E., Assistant Professor of Power Engineering, 1913.
Instructor in Machine Design, 1907; Instructor in Power Engineering, 1908.
- Matzke, Edith H., M.D., Lecturer on Hygiene, 1916. (Absent on leave.) Acting Adviser of Women, 1916; Adviser of Women, 1917.
- Maynard, Leonard Amby, A.B., Ph.D., Assistant Professor of Animal Husbandry, 1916. (Absent on leave.)
- Meade, DeVoe, B.S., Instructor in Animal Husbandry, 1915.
- Meara, Frank Sherman, A.B., Ph.D., M.D., Professor of Therapeutics, 1909. New York City.
- Meeks, Everett V., A.B., A.D.G., Acting Professor of Design in the College of Architecture, 1915.
- Merritt, Ernest George, M.E., Professor of Physics, 1903. (Absent on leave.)
Instructor, 1889; Assistant Professor, 1892; Dean of the Graduate School, 1909-14.
- Mertz, Pierre, A.B., Instructor in Physics, 1918. Assistant, 1917.
- Meusebeck, Carl F. W., B.S., Instructor in Entomology, 1918.
- Midjo, Christian, Assistant Professor of Freehand Drawing in the College of Architecture, 1912. Instructor, 1909.
- Milks, Howard Jay, D.V.M., Professor of Materia Medica; Director of the Small Animal Clinic (Veterinary) 1914.
Assistant in Physiology, 1903-05; Assistant Professor of Materia Medica and Therapeutics, 1909; Professor of Therapeutics and Clinical Medicine and of Surgery of Small Animals, 1913.
- Miltimore, Edward, M.D., Instructor in Medicine, 1917. New York City.
- Minns, Lua Alice, B.S., Instructor in Floriculture, 1914. Assistant, 1912.
- Misner, Edward Gardner, B.S., Ph.D., Assistant Professor of Farm Management, 1918. Instructor, 1914.
- Moler, George Sylvanus, A.B., B.M.E., Emeritus Professor of Physics, 1917.
Instructor, 1875; Assistant Professor, 1880; Professor, 1911.
- Monroe, Benton Sullivan, A.B., A.M., Ph.D., Assistant Professor of English, 1912.
Assistant, 1897; Instructor, 1900.
- Monsch, Helen, B.S., M.A., Assistant Professor of Home Economics, 1918.
- Montgomery, Edward Gerrard, M.A., Professor of Farm Crops, 1911.
- Montgomery, Walter Clark, M.D., Clinical Instructor in Surgery, Department of Laryngology and Rhinology, 1917. New York City.
Assistant, 1902-03, 1906-13.

- Montillon, Eugene Davis, B.Arch., Assistant Professor of Landscape Art, 1917.
Assistant, 1911; Instructor, 1912.
- Moore, Veranus Alva, B.S., M.D., V.M.D., Dean of the New York State Veterinary College, 1908, and Professor of Comparative Pathology, Bacteriology, and Meat Inspection, 1896.
- Mordoff, Richard Alan, B.S. in Agr., Instructor in Meteorology, 1917. (Absent on leave, first term.) Assistant in Physical Geography, 1909-10; 1912-13.
- Mordoff, William Emerson, M.E., Instructor in Experimental Engineering, 1918.
Instructor in Rural Engineering, 1915; Instructor in Machine Design, 1916.
- Morrill, Charles V., M.D., Instructor in Anatomy, 1915. New York City.
- Morrow, Hugh Ellis, B.S., Instructor in Chemistry, 1918. New York City.
- Moses, Winifred, B.S., Instructor in Home Economics, 1917. Assistant, 1914.
- Muchmore, Guy Brooks, A.B., Assistant Professor of Public Speaking, 1913.
- Muldoon, William Edward, D.V.M., Assistant Professor of Materia Medica and Small Animal Clinic, 1917. Instructor, 1913.
- Munford, Samuel Archer, A.B., M.D., Medical Adviser for Men, 1915; and Lecturer on Physical Diagnosis, 1916. (Absent on leave.)
- Murdock, Carleton Chase, B.S., A.M., Instructor in Physics, 1909. Assistant, 1909.
- Myers, Clyde Hadley, B.S., M.S., Ph.D., Professor of Plant Breeding, 1914.
Extension Instructor, 1911; Assistant Professor, 1912.
- Myers, William Irving, B.S., Assistant Professor of Farm Management, 1918.
Assistant, 1914; Instructor, 1916.
- Nammack, Charles Edward, Ph.B., M.D., LL.D., Professor of Clinical Medicine, Department of Medicine, 1898. New York City.
- Nammack, Charles Halpin, M.D., Clinical Instructor in Medicine, Department of Medicine, 1916. New York City. (Absent on leave.)
- Nanz, Ralph Simpson, B.S., Instructor in Botany, 1917. Assistant, 1912.
- Naylor, Dorothy Russell, A.B., Instructor in Mathematics, 1918.
- Needham, James George, B.S., M.S., Ph.D., Professor of Entomology and Limnology, 1911. Assistant Professor, 1906.
- Nichols, Edward Leamington, B.S., Ph.D., LL.D., Professor of Physics, 1887.
Dean of the College of Arts and Sciences, 1913-15.
- Nichols, Melvin, Instructor in Chemistry, 1918. Assistant, 1917.
- Niles, Walter Lindsay, M.D., Assistant Professor of Medicine, 1917; Acting Dean of the Medical College, 1918. New York City.
Instructor, 1904; Assistant Professor of Clinical Medicine, 1912.
- Noback, Charles Victor, D.V.M., Instructor in Veterinary Pathology, 1918.
- Noble, Charles Vernon, B.S., Instructor in Farm Management, 1916.
- Norris, Charles, Ph.B., M.D., Assistant Professor of Pathological Anatomy, Department of Pathology, 1917. New York City. Instructor, 1899.
- Northrop, Burdette Kibbe, Instructor in Electrical Engineering, 1918. Assistant, 1918.
- Northup, Clark Sutherland, A.B., Ph.D., Assistant Professor of English, 1903; Librarian of the Hart Memorial Library, 1914. Assistant, 1895; Instructor, 1897.
- Nutter, John A., M.D., Instructor in Clinical Surgery, Department of Orthopedics, 1918. New York City.
- Nye, Claribel, B.S., Extension Instructor in Home Economics, 1917. Assistant, 1913.
- Oberndorf, Clarence P., M.D., Clinical Instructor in Medicine, Department of Neurology, 1915. New York City.
- Ogden, Henry Neely, C.E., Professor of Sanitary Engineering, 1908.
Instructor in Civil Engineering, 1889-92, 1894-98; Assistant Professor, 1898; Assistant Professor of Sanitary Engineering, 1903.
- Ogden, Robert Morris, B.S., Ph.D., Professor of Education, 1916.
- Orndorff, William Ridgely, A.B., Ph.D., Professor of Organic and Physiological Chemistry, 1903. Instructor, 1887; Assistant Professor, 1890.

- Orth, Samuel Peter, B.S., Ph.D., Professor of Political Science, 1913.
Acting Professor, 1912.
- Osterberg, Emil, Instructor in Chemistry, 1911. New York City. Assistant, 1906.
- Overholser, Earle Long, B.S. in Agr., M.A., Assistant Professor of Pomology, 1917.
(Absent on leave.) Instructor, 1914.
- Owens, Frederick William, Ph.D., Assistant Professor of Mathematics, 1915.
Instructor, 1907.
- Owens, Helen Brewster, A.B., A.M., Instructor in Mathematics, 1918.
Lecturer, 1917.
- Page, E. Richard, B.S., Instructor in Electrical Engineering, 1914.
- Paine, Ernest Trowbridge, A.M., Instructor in Philosophy, 1916.
Secretary of the College of Arts and Sciences, 1913; first term, 1918-19.
- Papanicolau, George, Ph.D., M.D., Instructor in Anatomy, 1917. New York City.
Assistant, 1914.
- Pardee, Harold E. B., M.D., Instructor in Medicine, 1916. New York City.
(Absent on leave.)
- Parson, John Thomas, Assistant Professor of Drawing in the College of Civil Engineering, 1908.
Instructor in Civil Engineering, 1895; Assistant Professor, 1903.
- Patterson, Woodford, A.B., Secretary of the University and University Publisher, 1917.
- Peirce, Clarence Andrew, A.B., M.E., Assistant Professor of Machine Design, 1916. (Absent on leave.)
Instructor in Machine Design, 1911; Instructor in Power Engineering, 1913.
- Pelton, Henry H., M.D., Instructor in Medicine, 1918. New York City.
- Perkins, Harold Charles, M.E., Instructor in Power Engineering, 1918.
Instructor in Mechanics of Engineering, 1916.
- Perry, John Edwin, B.S. in C.E., Instructor in Railroad Engineering, 1915.
- Pertsch, John George, jr., M.E., Assistant Professor of Electrical Engineering, 1916. Assistant, 1909; Instructor, 1910.
- Phelps, Albert Charles, B.S., M.Arch., Professor of Architecture, 1913.
Instructor, 1899; Assistant Professor, 1903.
- Pickens, Earl Max, D.V.S., A.M., Professor of Comparative Pathology, (Veterinary) 1918. Assistant, 1911; Instructor, 1912; Assistant Professor, 1914; Professor of Diagnosis, 1917.
- Pond, Miles Albion, Ph.B., Assistant Professor of Civil Engineering, 1907.
Instructor, 1902.
- Pope, Paul Russel, A.B., Ph.D., Professor of German, 1915.
Instructor, 1902; Assistant Professor, 1906.
- Porter, Joseph Pullman, B.S., Instructor in Landscape Art, 1917. Assistant, 1917.
- Prescott, Frederick Clark, A.B., Assistant Professor of English, 1903.
Assistant Professor of Rhetoric, 1897.
- Pumpelly, Laurence, A.B., Ph.D., Assistant Professor of the Romance Languages and Literatures, 1914. (Absent on leave.) Assistant in Chemistry, 1908-09; Instructor in the Romance Languages and Literatures, 1910.
- Quarles, James T., University Organist, 1913, and Assistant Professor of Music, 1916.
- Rahe, Alfred Henry, M.D., Ph.D., Instructor in Hygiene, 1918. New York City.
Assistant, 1908.
- Rankin, William Howard, A.B., Ph.D., Assistant Professor of Plant Pathology, 1914. Instructor, 1912.
- Ranum, Arthur, A.B., Ph.D., Assistant Professor of Mathematics, 1910.
Assistant, 1904; Instructor, 1906.
- Recknagel, Arthur Bernhard, B.A., M.F., Professor of Forest Management and Utilization, 1917. Professor of Forestry, 1913.
- Reddick, Donald, A.B., Ph.D., Professor of Plant Pathology, 1911.
Assistant in Botany, 1905; Assistant in Plant Pathology, 1907; Instructor, 1908; Assistant Professor of Plant Pathology, 1909.

- Reed, Harold Lyle, A.B., Ph.D., Assistant Professor of Economics, 1916. (Absent on leave, first term.) Instructor, 1914-15.
- Reed, Hugh Daniel, B.S., Ph.D., Assistant Professor of Zoology, 1915.
Assistant, 1900; Instructor, 1902; Assistant Professor of Neurology and Vertebrate Zoology, 1906.
- Rees, Ralph W., A.B., B.S., Extension Professor of Pomology, 1917. Professor, 1916.
- Reese, Robert Grigg, Ph.G., M.D., Professor of Clinical Surgery, Department of Ophthalmology, 1911. New York City. Clinical Assistant, 1898; Instructor, 1899.
- Rettger, Ernest William, A.B., Ph.D., Assistant Professor of Applied Mechanics, 1908. Instructor in Civil Engineering, 1917.
- Reyna, Juan Estevan, E.E., Assistant Professor of Agricultural Drawing, 1917. Instructor, 1912.
- Rice, Frank Elmore, A.B., Ph.D., Assistant Professor of Chemistry in its Relations to Agriculture, 1916. Assistant, 1909; Instructor, 1912.
- Rice, James Edward, B.S. in Agr., Professor of Poultry Husbandry, 1907.
Assistant, 1892-93; Assistant Professor, 1903.
- Richards, John Harold, M.D., Instructor in Clinical Pathology and Medicine, 1911. New York City. Assistant, 1907.
- Richtmyer, Floyd Karker, A.B., Ph.D., Professor of Physics, 1918. (Absent on leave, first term.) Assistant, 1903-04; Instructor, 1906; Assistant Professor, 1918.
- Rider, Arthur John, B.S., M.S., Instructor in Chemistry, 1917. Assistant, 1916.
- Ries, Heinrich, Ph.B., A.M., Ph.D., Professor of Geology, 1906.
Instructor, 1898; Assistant Professor, 1902.
- Riley, Howard Wait, M.E., Professor of Rural Engineering, 1912.
Instructor in Experimental Engineering, 1906; Instructor in Farm Mechanics, 1907; Assistant Professor, 1909.
- Robb, Byron Burnett, B.S. in Agr., M.S. in Agr., Assistant Professor of Rural Engineering, 1913. Assistant in Farm Mechanics, 1910; Instructor, 1911.
- Roberts, Isaac Phillips, M.Agr., Emeritus Professor of Agriculture, 1903.
Assistant Professor of Agriculture, 1873; Professor of Agriculture, 1874; Director of Agricultural Experiment Station, 1888; Director of College of Agriculture, 1890; Dean of Faculty of Agriculture, 1896; Lecturer in Agriculture, 1903-06.
- Rodgers, Ralph Chapman, M.E., A.M., Instructor in Physics, 1907. Assistant, 1905.
- Rogers, Fred Stillman, B.S., M.E., Assistant Professor of Machine Design, 1918.
Instructor, 1914.
- Rogers, John, A.B., Ph.D., M.D., Professor of Clinical Surgery, Department of Surgery, 1909. New York City. Instructor, 1898.
- Roper, Joseph Charles, M.D., Instructor in Clinical Medicine, Department of Pediatrics, 1918. New York City. Assistant in Histology, 1901-04, 1904-06; Clinical Instructor in Medicine, Department of Pediatrics, 1911.
- Rose, Flora, B.S., M.A., Professor of Home Economics, 1911. Lecturer, 1907.
- Ross, Harold Ellis, B.S.A., M.S. in Agr., Professor of Dairy Industry, 1912.
Assistant, 1906; Instructor, 1907; Assistant Professor, 1909.
- Rowlee, Willard Winfield, B.L., D.Sc., Professor of Botany in the College of Arts and Sciences, 1906. (Absent on leave.)
Instructor, 1889; Assistant Professor, 1893.
- Saby, Rasmus S., Ph.D., Assistant Professor of Political Science, 1912.
Assistant, 1909; Instructor in Economics, 1910.
- Sampson, Martin Wright, B.A., M.A., Goldwin Smith Professor of English Literature, 1912. Acting Professor, 1908; Professor, 1909.
- Samuels, Bernard, M.D., Clinical Instructor in Surgery, Department of Ophthalmology, 1915. New York City.
- Sanderson, Dwight, B.S., B.S. in Agr., Professor of Rural Organization, 1918.
- Sanford, Maude, Instructor in Home Economics, 1918.

- Savage, Elmer Seth, B.S. in Agr., M.S. in Agr., Ph.D., Professor of Animal Husbandry, 1913. Assistant, 1907; Instructor, 1908; Assistant Professor, 1910.
- Sawdon, Will Miller, B.S. in M.E., M.M.E., Assistant Professor of Mechanical Engineering, 1908. Instructor, 1904.
- Schindler, Theresa Elizabeth, B.A., M.S., Instructor in Floriculture, 1918.
- Schmidt, Nathaniel, A.B., A.M., Professor of Semitic Languages and Literatures, 1896.
- Schmoker, Edward Adolf, D.V.M., Instructor in Obstetrics and Diseases of Breeding Cattle, 1918.
- Schneck, Henry William, B.S., M.S.A., Assistant Professor of Vegetable Gardening, 1917. Instructor, 1913.
- Schoder, Ernest William, B.S., Ph.D., Assistant Professor of Experimental Hydraulics, 1905. (Absent on leave.) Engineer in charge of the Hydraulic Laboratory, 1904.
- Schramm, Jacob Richard, A.B., Ph.D., Professor of Botany in the New York State College of Agriculture, 1917. Assistant Professor, 1915.
- Schultze, Otto Henry, A.B., M.D., Professor of Medical Jurisprudence, 1917. New York City. Instructor, 1898; Lecturer, 1904; Assistant Professor of Pathological Anatomy, 1908, and Professor of Medico-Legal Pathology, 1912.
- Schumm, Paul Berwig, B.S., M. in L.D., Instructor in Landscape Art, 1917. (Absent on leave.) Assistant in Medieval History, 1915.
- Schwartz, Hans Jörgen, M.D., Instructor in Clinical Medicine, Department of Dermatology, 1917. New York City. Assistant, 1903; Clinical Instructor, 1906.
- Seery, Francis Joseph, Bach. Mech. Sci., Assistant Professor of Civil Engineering, 1907. Instructor, 1905.
- Seulke, Karl John, B.S., M.S., Ph.D., Assistant Professor of Animal Husbandry, 1917. Instructor in Animal Husbandry, 1914.
- Severance, Mildred, A.B., Instructor in Physics, 1917. Assistant, 1913.
- Shadle, Albert Ray, B.A., M.A., Assistant Professor of Zoology, 1918. Assistant, 1915; Instructor, 1916.
- Shaffer, Newton Melman, M.D., Emeritus Professor of Clinical Surgery, Department of Orthopedics, 1912, and of Orthopedic Surgery, 1913. Professor of Orthopedic Surgery, 1898; Professor of Orthopedics, 1900; Professor of Clinical Surgery, Department of Orthopedics, 1906-11.
- Sharp, Lester Wayland, B.S., Ph.D., Assistant Professor of Botany in the College of Agriculture, 1916. Instructor, 1914.
- Sharpe, Francis Robert, B.A., Ph.D., Assistant Professor of Mathematics, 1910. Assistant, 1905; Instructor, 1906.
- Shearer, John Sandford, B.S., Ph.D., Professor of Physics, 1909. (Absent on leave.) Assistant, 1893; Instructor, 1894; Assistant Professor, 1903.
- Sheldon, William Hills, M.D., Assistant Professor of Clinical Medicine, 1916. New York City. Assistant, 1910; Instructor, 1911.
- Sheppard, Hubert, A.B., A.M., Instructor in Psychology, 1918.
- Sicard, Montgomery Hunt, B.S., M.D., Instructor in Therapeutics, 1910. New York City. (Absent on leave.) Instructor in Physical Diagnosis, 1901-17.
- Silva, George, M.E., Instructor in Electrical Engineering, 1918.
- Simpson, Sutherland, D.Sc., M.D., F.R.S.E., Professor of Physiology, 1908.
- Smiley, Edwina Maria, B.A., Instructor in Plant Pathology, 1917. Assistant, 1916.
- Smith, Albert William, B.M.E., M.M.E., Professor of Power Engineering and Dean of Sibley College, 1904. Assistant Professor, 1887-91.
- Smith, Frederick Miller, A.B., Assistant Professor of English, 1918. Instructor, 1910.
- Smith, Gladys Elizabeth, B.S., Instructor in Home Economics, 1917.
- Smith, Harmon, A.B., M.D., Professor of Clinical Surgery, Department of Laryngology and Rhinology, 1913.

- Smith, Herman Lyle, M.S., Instructor in Mathematics, 1918.
- Sneed, William L., M.D., Clinical Instructor in Surgery, Department of Orthopedic Surgery, 1917. New York City. (Absent on leave.)
- Snyder, Virgil, B.S., A.M., Ph.D., Professor of Mathematics, 1910.
Instructor, 1895; Assistant Professor, 1903.
- Somers, Ransom Evarts, A.B., A.M., Ph.D., Assistant Professor of Geology, 1916..
Instructor, 1912.
- Soule, William L., M.D., Clinical Instructor in Anaesthesia, Department of Surgery, 1916. New York City. (Absent on leave.)
- Spaulding, Harry Van Ness, M.D., Instructor in Operative Surgery, 1914. New York City.
- Spencer, Henry J., M.D., Instructor in Medicine, 1918. New York City.
- Spring, Samuel Newton, A.B., M.F., Professor of Silviculture, 1917. (Absent on leave.) Professor of Forestry, 1912.
- Stacy, Thomas Ford, Instructor in Machine Design, 1917.
- Stagg, Charles Tracey, LL.B., Professor of Law, and Secretary of the College, 1914. Instructor, 1908; Assistant Professor of Law, 1909.
- Stanton, Clifford Alfred, Instructor in Physics, 1918. Assistant, 1917.
- Stechmann, Frederick W., M.D., Clinical Instructor in Medicine, Department of Neurology, 1918. New York City.
- Steiner, Joseph M., B.S., M.D., Instructor in Roentgenology, 1917. New York City.
- Stephens, Richmond, M.D., Clinical Instructor in Surgery, Department of Orthopedic Surgery, 1917. New York City.
- Stephenson, J. W., M.D., Clinical Instructor in Medicine, Department of Neurology, 1918. New York City.
- Stevens, Shepherd, A.B., A.D.G., Assistant Professor of Architecture, 1915. (Absent on leave, first term.)
- Stevenson, Charles R., B.S., Instructor in Plant Pathology, 1918.
- Stewart, Fred Waldorf, A.B., Instructor in Anatomy, 1916.
Assistant in Histology and Embryology, 1915-16.
- Stewart, Rolland Maclaren, B.A., Ph.D., Professor of Rural Education, 1918.
Acting Professor, 1918.
- Stillman, Ralph G., M.D., Instructor in Clinical Medicine, 1912. New York City. (Absent on leave.)
- Stockard, Charles Rupert, B.S., M.S., Ph.D., Professor of Anatomy, 1911. New York City. Assistant in Embryology and Histology, 1906; Instructor in Comparative Morphology, 1908; Assistant Professor, 1909.
- Stocking, William Alonzo, jr., B.Agr., B.S.A., M.S. in Agr., Professor of Dairy Industry, 1909.
Assistant Professor, 1906; Acting Director of the College of Agriculture, 1913-14.
- Stone, John Lemuel, B.Agr., Professor of Farm Practice, 1907.
Assistant, 1897; Assistant Professor, 1903.
- Stoneman, Bertha, Ph.B., D.Sc., Botany, College of Arts and Sciences, 1918.
- Strahan, James Lewis, B.S. in Agr., M.S. in Agr., Instructor in Rural Engineering, 1913. Assistant in Military Science and Tactics, 1911-12.
- Strong, Lawrence W., M.D., Instructor in Gynecological Pathology, 1918. New York City.
- Strunk, William, jr., A.B., Ph.D., Professor of English, 1909. Instructor, 1891; Assistant Professor, 1899.
- Sturgis, Cony, A.B., Assistant Professor of the Romance Languages, 1918.
Instructor, 1908-10; 1915-18.
- Sullivan, Timothy Francis, M.D., Instructor in Military Surgery, 1918. New York City.

- Sumner, James Batcheller, Ph.D., Assistant Professor of Biochemistry in the Department of Physiology, 1914.
- Sunderville, Earl, D.V.M., Assistant Professor of Veterinary Anatomy, 1913. Assistant, 1908; Instructor, 1909.
- Supplee, George Cornell, B.S., M.S. in Agr., Instructor in Dairy Industry, 1914. Assistant, 1912.
- Sweet, Alfred Henry, A.B., A.M., Ph.D., Acting Assistant Professor of English History, 1917. Assistant, 1914-15.
- Swift, Homer F., M.D., Associate Professor of Medicine, 1917. New York City. (Absent on leave.)
- Switzer, Frederick George, M.E., Assistant Professor of Hydraulics, 1917. Instructor, 1916.
- Tailby, George Walter, jr., B.S.A., Instructor in Animal Husbandry and Superintendent of Live Stock, 1907.
- Tanner, John Henry, B.S., Ph.D., Professor of Mathematics, 1904. Instructor, 1892; Assistant Professor, 1894.
- Taylor, Alfred S., M.D., Professor of Clinical Surgery, 1918. New York City. Lecturer on the Peripheral Nervous System, 1910; Lecturer on Surgery, 1911; Assistant Professor of Operative Surgery, 1913; Professor of Operative Surgery, 1914.
- Thilly, Frank, A.B., Ph.D., LL.D., Professor of Philosophy, 1906; and Dean of the College of Arts and Sciences, 1915. Instructor, 1892-93.
- Thompson, Homer Columbus, B.Sc., Professor of Vegetable Gardening, 1918.
- Thompson, William Gilman, Ph.B., M.D., Emeritus Professor of Medicine, 1916. New York City. Professor of Medicine, 1898.
- Thro, William Crooks, B.S.A., A.M., M.D., Assistant Professor of Clinical Pathology, 1910. New York City. Assistant, 1901; Instructor, 1902-05; 1910.
- Titchener, Edward Bradford, A.B., A.M., Ph.D., LL.D., D.Sc., Litt.D., Sage Professor of Psychology in the Graduate School, 1910; Lecturer in Psychology, 1912. Assistant Professor, 1892; Professor, 1895.
- Tobey, Clinton Russell, Instructor in Machine Design, 1917.
- Torrey, John Cutler, A.B., Ph.D., Professor of Hygiene, 1915. New York City. Assistant Instructor, 1903; Instructor and Lecturer on Hygiene, 1909; Assistant Professor of Experimental Pathology, 1910.
- Townsend, Clarence Ellsworth, M.E., Instructor in Machine Design, 1910.
- Trevor, Joseph Ellis, Ph.D., Professor of Thermodynamics, 1908. Assistant Professor of Chemistry, 1892; Assistant Professor of General and Physical Chemistry, 1894; Professor, 1900; Professor of Physical Chemistry, 1903.
- Troy, Hugh Charles, B.S. in Agr., Professor of Dairy Industry, 1912. Assistant, 1897.
- Turnure, Percy R., M.D., Assistant Professor of Clinical Surgery, Department of Surgery, 1916. New York City.
- Tyrrell, William David, M.D., Clinical Instructor in Medicine, Department of Pediatrics, 1908. New York City.
- Udall, Denny Hammond, B.S.A., D.V.M., Professor of Veterinary Medicine and Director of Ambulatory Clinic, 1910. Demonstrator, 1900-1; Acting Professor, 1908.
- Underwood, Paul Halladay, C.E., Assistant Professor of Topographic and Geodetic Engineering, 1912. Instructor in Civil Engineering, 1907.
- Upton, George Burr, M.E., M.M.E., Assistant Professor of Experimental Engineering, 1910. Instructor, 1905.
- Urquhart, Leonard Church, C.E., Instructor in Civil Engineering, 1911. (Absent on leave.)
- Usher, Abbott Payson, A.B., A.M., Ph.D., Assistant Professor of Economics, 1914. Instructor, 1910.
- Vance, Benjamin, M.D., Instructor in Surgical Pathology and Pathologist to the Second Division, Bellevue Hospital, 1915. New York City. (Absent on leave.)

- Vandegrift, George W., A.M., M.D., Clinical Instructor in Surgery, Department of Ophthalmology, 1911. New York City.
- van der Does de Bye, Arnoud Jacob Joris, M.E., Instructor in Experimental Engineering, 1918.
- Van Fleet, M.E., M.D., Clinical Instructor in Medicine, Department of Neurology, 1918. New York City.
- Van Rensselaer, Martha, A.B., Professor of Home Economics, 1911.
Supervisor of Farmer's Wives' Reading Course, 1903; Lecturer, 1907.
- Van Volkenberg, Horatio Luther, D.V.M., Instructor in Materia Medica, Veterinary College, 1918.
- Walker, Charles Leopold, C.E., Assistant Professor of Sanitary Engineering, 1912.
Instructor in Civil Engineering, 1905; Assistant Professor of Applied Mechanics, 1908.
- Wallace, Charleton, M.D., Professor of Clinical Surgery, Department of Orthopedic Surgery, 1914. New York City. Assistant Professor, 1913.
- Wann, Frank Burkett, B.S., Instructor in Botany, 1916.
- Ward, George Gray, jr., M.D., Associate Professor of Clinical Surgery, Department of Gynecology, 1917. Instructor, 1898; Assistant Professor, 1916.
- Warner, Annette J., Assistant Professor of Home Economics, 1917.
Assistant Professor of Design in the Department of Home Economics, 1913.
- Warren, George Frederick, jr., B.Sc., B.S.A., M.S.A., Ph.D., Professor of Farm Management, 1909. Assistant Professor of Agronomy, 1906.
- Way, Walter Denslow, D.V.M., Instructor in Veterinary Medicine, 1917.
- Weld, Harry Porter, Ph.B., Ph.D., Assistant Professor of Psychology, 1912.
- Wellhouse, Walter Housley, A.B., A.M., Instructor in Biology, 1918.
Assistant, 1917.
- Wells, Albert Edward, Professor of Machine Construction, 1916.
Foreman of Machine Shop, 1904; Superintendent of Shops, 1905; Assistant Professor, 1912.
- Whetzel, Herbert Hice, A.B., A.M., Professor of Plant Pathology, 1909.
Assistant, 1903; Assistant Professor, 1906.
- White, Andrew Curtis, A.B., Ph.D., Reader in Greek, 1903, and Assistant Librarian, 1889. Instructor in Latin, 1885-86; Instructor in Greek and Latin, 1886-88; Instructor in Latin, 1888-89; Instructor in Greek, 1898-99; Reader in Greek, 1899-1901.
- White, Edward Albert, B.S., Professor of Floriculture, 1913.
- White, Georgia Laura, Ph.B., Ph.D., Adviser of Women, 1918.
- Whiting, Frederick, A.M., M.D., Professor of Clinical Surgery, Department of Otology, 1904. New York City.
- Whiting, William Alonzo, B.S., Instructor in Dairy Industry, 1917.
- Wick, Frances Gertrude, A.B., A.M., Ph.D., Acting Assistant Professor of Physics, 1918.
- Wiegand, Karl McKay, B.S., Ph.D., Professor of Botany in the College of Agriculture, 1913. Assistant, 1894; Instructor, 1899-07.
- Wiggans, Roy Glen, B.S. in Agr., M.S. in Agr., Instructor in Farm Crops, 1915.
Assistant, 1914.
- Wilber, David Truxton, A.B., Instructor in Physics, 1918. Instructor in Mineralogy and Petrography, 1912-14; Assistant in Mineralogy and Petrography, 1917.
- Wilder, Burt Green, B.S., M.D., Emeritus Professor of Neurology and Vertebrate Zoology, 1910.
Professor of Comparative Anatomy and Zoology, 1867; Professor of Physiology, Anatomy, and Zoology, 1878; Professor of Physiology, Vertebrate Zoology and Neurology, 1893; Professor of Neurology and Vertebrate Zoology, 1905.
- Willcox, Walter Francis, A.B., L.L.B., A.M., Ph.D., LL.D., Professor of Economics and Statistics, 1910.
Instructor in Logic, 1891; Assistant Professor of Social Science and Statistics and Political Economy, 1892; Assistant Professor of Social Science and Statistics, 1893; Associate Professor, 1894; Professor, 1898; Professor of Political Economy and Statistics, 1901; Dean of the Faculty of Arts and Sciences, 1901-07.

- Williams, Walter Long, Professor of Obstetrics and Research and Professor of the Diseases of Breeding Cattle, 1915.
Professor of Principles and Practice of Veterinary Surgery, Zootechny, Obstetrics, and Jurisprudence, 1896; Professor of Veterinary Surgery and Obstetrics and Investigator of Diseases of Young Animals and Breeding Cattle, 1914.
- Williamson, Harvey C., M.D., Instructor in Obstetrics, 1917. New York City.
- Willis, Elias Root Beadle, A.B., A.M., Instructor in Greek, 1918.
- Wilson, Benjamin Dunbar, B.S., M.S., Instructor in Soil Technology, 1917.
Assistant, 1915.
- Wilson, James Kenneth, B.S., Ph. D., Assistant Professor of Soil Technology, 1914.
Assistant in Plant Physiology, 1912; Instructor and Investigator in Botany, 1913.
- Wilson, May G., M.D., Clinical Instructor in Medicine, Department of Pediatrics, 1918. New York City.
- Wilson, Wilford Murry, M.D., Professor of Meteorology, 1910.
Lecturer, 1906; Instructor, 1907.
- Winans, James Albert, A.B., A.M., LL.B., Professor of Public Speaking, 1914.
Instructor, 1899; Acting Assistant Professor, 1901; Instructor, 1903; Assistant Professor, 1904.
- Wing, Henry Hiram, B.Agr., M.S. in Agr., Professor of Animal Husbandry, 1903.
Instructor in Dairy Industry, 1890; Assistant Professor of Animal Husbandry and Dairy Industry, 1891.
- Wing, Lucius A., B.S., M.D., Clinical Instructor in Surgery, 1912. New York City.
- Winters, Joseph Edcil, M.D., Professor of Clinical Medicine, Department of Pediatrics, 1898. New York City.
- Wood, Edgar Harper, M.E., M.M.E., Professor of Mechanics of Engineering, 1910. Instructor in Drawing, 1899; Assistant Professor of Machine Design, 1907.
- Woodruff, Edwin Hamlin, LL.B., Professor of Law, 1896; Dean of the College of Law, 1916. Instructor in English, 1888-90; Acting Dean, 1914-16.
- Woolsey, George, A.B., M.D., Professor of Clinical Surgery and Anatomy, 1898. New York City.
- Worcester, James, M.D., Instructor in Clinical Surgery, 1915. New York City.
(Absent on leave.)
- Work, Paul, A.B., B.S., M.S. in Agr., Acting Professor of Vegetable Gardening, 1917. (Absent on leave.)
Instructor and Investigator in Vegetable Gardening, 1910.
- Works, George Alan, Ph.B., M.S. in Agr., Professor of Rural Education, 1914.
- Wright, Albert Hazen, A.B., A.M., Ph.D., Assistant Professor of Zoology, 1915.
Assistant in Neurology and Vertebrate Zoology, 1905; Instructor, 1908.
- Wright, Ivan, B.A., B.S., M.S., Instructor in Rural Economy, 1918.
Assistant, 1917.
- Wright, William Joseph, B.S., M.S., Professor of Rural Education, 1918.
- Wright, William W., M.D., Clinical Instructor in Medicine, Department of Psychiatry, 1912. New York City.
- Wyckoff, Ralph W. G., B.S., Instructor in Chemistry, 1917.
- Young, Allyn Abbott, Ph. B., Ph.D., Professor of Economics and Finance, 1913.
(Absent on leave.)
- Young, Benjamin Percy, B.S., Instructor in Entomology, 1917.
- Young, Charles Van Patten, A.B., Professor of Physical Education and Director of the Gymnasium, 1906. Acting Professor, 1904.
- Young, George, jr., B.Arch., Professor of the Theory of Construction in the College of Architecture, 1915. (Absent on leave, first term.)
Assistant Professor, 1909.
- Young, Harry P., B.S., Instructor in Farm Management, 1918.
- Young, Helen Binkerd, B.Arch., Assistant Professor of Home Economics, 1911.
Instructor, 1910.

***EXTENSION STAFF OF THE COLLEGE OF AGRICULTURE**

Ayres, Winfred Enos, Extension Instructor in Dairy Industry, 1915.

Instructor, 1914.

Babcock, Howard Edward, Ph.B., State Leader of County Agents and Assistant Professor in Extension Service, 1917.

Assistant State Director of Farm Bureaus, and Assistant Professor, Department of Farm Bureaus, 1914.

Banks, Marion Houser, B.S., Extension Instructor in Farm Mechanics, 1918.

Barron, John Hall, B.S.A., Assistant Extension Professor of Farm Crops, 1915.

Bier, Robert, Extension Instructor in Vegetable Gardening, 1917. (Absent on leave.)

Blinn, Alice M., B.S., Extension Instructor in Home Economics.

Blodgett, Forest Milo, Ph.D., Assistant Extension Professor of Plant Pathology, 1917. Assistant Professor, 1915.

Blodgett, Warren Kendall, A.B., Assistant Extension Professor of Farm Mechanics, 1917.

Botsford, Harold Eugene, B.S., Extension Instructor in Poultry Husbandry, 1918. Assistant, 1916.

Boutelle, Clarence Alfred, Assistant Extension Professor of Animal Husbandry, 1916.

Boyle, James Ernest, A.M., Ph.D., Extension Professor of Rural Economy, 1917.

Bussell, Frank Pores, B.A., Extension Instructor in Plant Breeding, 1917.

Canon, Helen, B.A., B.S., Extension Instructor in Home Economics, 1917. Assistant, 1915.

Chupp, Charles, A.B., Ph.D., Extension Instructor in Plant Pathology, 1917. Assistant, 1912; Instructor, 1914.

Clark, Charles Parsons, B.S., Extension Instructor in Farm Management, 1917. Assistant, 1915; Instructor, 1916.

Collingwood, G. Harris, B.S., Assistant Extension Professor of Forestry, 1916.

Coryell, Jay, Assistant State Leader of County Agents, 1917.

Crandall, Alice Van Scoy, B.S., Extension Instructor in Home Economics, 1918. Assistant, 1917.

Dimock, Annette C., Extension Assistant in Home Economics, 1918.

Dutton, George Clayton, Extension Instructor in Dairy Industry, 1917.

Frost, Walter Sprague, B.S., Extension Instructor in Agricultural Chemistry, 1918. Instructor in Soil Technology, 1915; Assistant in Agricultural Chemistry, 1916.

Gilkey, Royal, B.S. in Agr., Assistant Professor in Extension Service, 1917, and Supervisor of Reading Courses, 1911.

Instructor, 1911; Assistant Professor of Extension Teaching, 1914.

Hurd, Lewis Merwin, Extension Instructor in Poultry Husbandry, 1914. Assistant, 1909.

Krum, Walter Gernet, Extension Instructor in Poultry Husbandry, 1917. Assistant, 1912; Instructor, 1916.

Leonard, Mortimer Demarest, B.S., Extension Instructor in Entomology, 1917. Assistant, 1912.

McNeal, Nancy Hill, Ph.B., Extension Instructor in Home Economics, 1918. Instructor, 1917.

Mills, C. G., Extension Instructor in Rural Engineering, 1918.

Ogle, Robert Carroll, Extension Instructor in Poultry Husbandry, 1918.

Pease, Rodney Wesson, Instructor in Extension Teaching, 1918.

Robinson, Montgomery, Litt.B., B.S., Assistant Professor in Extension Service, 1917. Assistant, 1913; Instructor, 1914; Assistant Professor of Extension Teaching, 1916.

Royce, Charles Howard, B.S. in Agr., M.S. in Agr., Assistant Extension Professor of Animal Husbandry, 1916.

*This list does not include the extension teachers who are members of the faculty.

- Scoville, Gad Parker, B.S. in Agr., Assistant Extension Professor of Farm Management, 1917. Assistant Professor, 1914.
- Smith, Mark J., B.S., Assistant Extension Professor of Animal Husbandry, 1917.
- Tapke, Victor Ferdinand, B.S., Extension Instructor in Plant Pathology, 1918. Assistant, 1916.
- Vogel, Irvin H., Extension Instructor in Plant Pathology, 1918.
- Voorhees, John Haring, B.S., Assistant Extension Professor of Farm Crops, 1918.
- Warsaw, Wesley Worth, B.S. in A.E., Assistant Extension Professor of Soil Technology, 1916. Instructor, 1914.
- Wehrle, Lawrence Paul, B.S., M.S., Extension Instructor in Entomology, 1918.
- Wheeler, Ralph Hicks, B.S., Assistant Professor in Extension Service, 1917. Assistant, 1909; Instructor, 1910; Assistant Professor of Extension Teaching, 1912.
- Whitney, Cass Ward, B.S., Instructor in Extension Service, 1917. (Absent on leave, first term.) Instructor in Extension Teaching, 1913.

ASSISTANTS

- Acker, Leonard, Economics.
- Allen, Howard Bushnell, B.S.A., Rural Education.
- Armstrong, Edward McPherson, M.D., Clinical Surgery, New York City.
- Artschwager, Ernst F., B.S., Ph.D., Botany.
- Atterbury, Ruth Rand, A.B., A.M., Anatomy, New York City.
- Barrett, Willard Riehlman, Chemistry.
- Barstow, Mary E., Economics.
- Bedient, Harold Arthur, A.B., Chemistry.
- Beekman, Fenwick, M.D., Clinical Surgery, New York City.
- Bellis, Bernard. Agricultural Chemistry.
- Berkoff, Henry S., Zoology.
- Blanchard, John D., Psychology.
- Bohrer, Jack V., M.D., Clinical Surgery, New York City.
- Bolling, Richard W., M.D., Clinical Surgery, New York City.
- Bull, Arthur Walker, Chemistry.
- Burlage, Stanley Ross, B.S., Physiology.
- Burr, Emily T., A.B., Pathology, New York City.
- Bush, Howard Stanley, Wood Shop.
- Carroll, Arlo Bowlby, Vegetable Gardening.
- Cassassa, Charles S. B., A.B., M.D., Pathological Anatomy, New York City.
- Clark, Lee Hinchman, Chemistry.
- Colony, Myron Wesley, Chemistry.
- Cornwell, Ralph Thomas Kline, B.Chem., Chemistry.
- Cotton, John, Poultry Husbandry.
- Craig, Stewart L., M.D., Otology, New York City.
- Cramer, Earnest F., B.S., Rural Education.
- Deitz, F. C., Pomology.
- Detweiler, John Detweiler, A.B., M.A., Entomology.
- Dimock, Julian A., Forestry.
- Douglas, Frank William, A.B., A.M., Chemistry.
- Drake, E.M., Plant Pathology.
- Dudley, Guilford S., M.D., Clinical Surgery, New York City.
- Dunlap, Vining Campbell, A.B., Botany.
- Dye, Joseph Alma, A.B., Physiology.
- Edmonson, Ellen, A.B., Entomology.
- Einhorn, Max, M.D., Lecturer, Diseases of the Stomach, New York City.
- Elkhardt, A. J., Economics.
- Evans, Deward, Armenias, Foundry.
- Evans, Jenette, Physiology.
- Eveleth, Emily, A.B., Entomology.
- Everingham, Sumner, M.D., Clinical Surgery, New York City.
- Everitt, John S. B.S., Forestry.

Eyster, Lewis A., A.B., Plant Breeding.
Eyster, William Henry, A.B., A.M., Plant Breeding.
Fisher, Mary Jones, A.B., A.M., Zoology.
Flint, Joseph Howard, Chemistry.
Fraser, Cuthbert B., Botany.
Fuller, James W., Veterinary Pathology.
Gavin, Helen, M.D., Chemistry, New York City.
Georgia, Ada Elgiva, Natural History.
Green, Dana, Machine Shop.
Griffin, Frank Alexander, Chemistry.
Gustin, Daniel Snyder, Chemistry.
Hall, Thomas D., Soil Technology.
Hansson, K. G., Physical Education.
Hasselbeck, Eugene Joseph, Chemistry.
Head, Walter Liston, Forge Shop.
Hemphill, Raymond John, Chemistry.
Hillhouse, Eleanor, B.S., Home Economics.
Hogan, Agnes Cecilia, B.S., Zoology.
Hooper, Leroy, Pattern Shop.
Hoskins, F., Political Science.
Howe, Burdette Newton, Machine Shop.
Hunn, Charles Edward, Landscape Art.
Jennings, B. A., Farm Practice.
Kennedy, James Arthur, Chemistry.
Koch, Katherine, B.S., A.M., Landscape Art.
Leppart, John Culvert, Chemistry.
Lerch, Cornelia, Poultry Husbandry.
Levine, Samuel, M.D., Medicine, New York City.
Littlewood, William, Physics.
McBerty, Ford Hapgood, Physics.
McCarty, James Wilson, Geology.
MacDonald, Gertrude Amelia Johnson, B.S., M.S., Zoology.
McDonnell, Frank William, Machine Design.
McMullen, Eleanor C., Zoology.
Martin, Thomas Lysons, B.A., Soil Technology.
Maver, W. Wallace, M.D., Roentgenology, New York City.
Maxson, Lawrence Meredith, A.B., English History.
May, Frederick, Physics.
Mayer, H. W., jr., Forestry.
Mekeel, Amy Grace, A.B., Zoology.
Mereness, K. A., Machine Design.
Mittleman, Louis, Chemistry.
Mulcahy, Thomas A., M.D., Otology, New York City.
Muller, Henry Richard, A.B., M.D., Pathology, New York City.
Murphy, Helen Elizabeth, B.S., Biology.
Neal, Josephine B., M.D., Medicine, New York City.
Nill, Frederick, Chemistry.
O'Connell, Walter Christopher, Physical Training. (Absent on leave.)
Owens, Mark, B.S., Forestry.
Palmer, Douglas, M.D., Anatomy, New York City. (Absent on leave.)
Perry, Raymond Arnold, B.S., Dairy Industry.
Peters, John P., M.D., Assistant in Medicine, New York City. (Absent on leave.)
Pierce, William Marion, A.B., Physics.
Purdy, Helen Alice, A.B., Plant Pathology.
Puttick, Gail Ferguson, B.S., Political Science.
Randolph, Lowell Fitz, Ph.B., Botany.
Rane, Fannie Coolbaugh, B.A., Botany.
Richmond, William Edwin, Physics.
Ringer, A. I., M.D., Lecturer on Physiology, New York City.

Rothwell, Alice, A.B., Physics.
 Ryan, P., Machine Design.
 Santee, Harold Elmore, A.B., M.D., Clinical Surgery, New York City.
 Schack, William, A.B., Chemistry.
 Schmutz, Frederick Charles, Chemistry.
 Schradieck, Henry Edward, B.S., Natural History.
 Scott, Merit, Physics.
 Seaman, Helen, B.A., Botany.
 Seamon, Emily J., M.D., Experimental Medicine, New York City.
 Seibold, Carl Stephen, Machine Design.
 Seltzer, William, Soil Technology.
 Shaw, J. P., Economics.
 Sheldon, Pearl Gertrude, Geology.
 Slimm, Helen L., Chemistry.
 Smith, Christiana, B.A., Histology.
 Smith, Raymond Stratton, B.S., M.S., Soil Technology.
 Stork, Harvey Elmer, A.B., Botany. (Absent on leave.)
 Stratton, Mildred Elizabeth, B.A., Botany.
 Tarris, Venia Laota, Entomology.
 Thomas, R. H., Rural Education.
 Traver, Jay R., B.A., Entomology.
 Vanderhoef, James Elijah, Foundry.
 Van Nuys, Ellen Margaret, Physics.
 Van Wagenen, William Perrine, A.B., Anatomy.
 Weaver, William Jack, B.S., Rural Education.
 Wheeler, George Whiting, M.D., Bacteriology.
 White, Anna Laura, Physics.
 White, Harriet D., M.D., Chemistry.
 Willison, Dorothy, Agricultural Chemistry.
 Wintringham, Andrews Clement, Chemistry.
 Working, Holbrook, A.B., Rural Economy. (Absent on leave, first term.)
 Wright, Mary Evalena, B.S., Chemistry.

STANDING COMMITTEES OF THE UNIVERSITY FACULTY

The year in parenthesis indicates the date of retirement.

Committee on Admission by Certificate. Professor G. P. Bristol (1921), chairman; the Secretary of the University Faculty; Professors P. R. Pope (1922); R. C. Gibbs (1922); J. H. Tanner (1919); G. A. Works (1919); Lawrence Pumpelly (1920); C. W. Ham (1920); J. P. Bretz (1921); the Registrar.

Committee on Student Affairs. The Secretary of the University Faculty, chairman; Professors M. W. Sampson (1922); H. H. Wing (1922); H. N. Ogden, substitute for Ernest Blaker (1919); C. A. Martin (1919); F. A. Barton (1920); Cornelius Betten (1921); C. T. Stagg (1921); the Registrar; G. W. Cavanaugh (1920).

Committee on Undergraduate Scholarships. The Secretary of the University Faculty, chairman; Professors A. L. Andrews (1922); R. C. Gibbs (1922); J. H. Tanner (1919); C. E. Bennett (1919); G. L. Burr (1920); S. G. George (1920); R. F. Keniston (1921); William Strunk (1921).

Committee on University Policy. The President; the Secretary of the University Faculty; the Dean of the Graduate School; the Deans of the several college faculties; the Secretary of the Medical College at Ithaca.

Committee on Relations to Secondary Schools. Professor G. P. Bristol, chairman; the Secretary of the University Faculty; Professors G. A. Works, J. P. Bretz, J. H. Tanner, P. R. Pope, L. N. Broughton, R. C. Gibbs, the Registrar.

Committee on Excuses from Physical Training and Military Science. The Secretary of the University Faculty, chairman; the Commandant; the Professor of Physical Culture; Professors Cornelius Betten and Herman Diederichs; Miss Canfield.

Entrance Examination Board. Professor G. P. Bristol (1920), chairman; the Secretary of the University Faculty; Professors C. H. Hull (1922); Cony Sturgis (1922); Virgil Snyder (1919); B. S. Monroe (1919); Donald English (1921); O. A. Johannsen (1921); Woodford Patterson.

Committee on Official Publications. The President; the Secretary of the University Faculty; the Dean of the Graduate School; the Deans of the several college faculties; the Secretary of the Medical College at Ithaca; the Registrar; the Secretary of the University.

Committee on Hygiene and Sanitation. Professors A. T. Kerr, V. A. Moore, H. N. Ogden, C. V. P. Young, and Dr. Munford.

Committee on Music. The Secretary of the University Faculty, Professors G. P. Bristol and E. H. Woodruff.

Committee on Prizes. The Secretary of the University Faculty, Professors C. H. Hull and C. T. Stagg.

OTHER OFFICERS

Schurman, Jacob Gould, A.M., D.Sc., LL.D., President of the University, 1892.
Professor of Philosophy, 1886.

Williams, Emmons Levi, Comptroller of the University, 1914.
Assistant to the Treasurer, 1872; Acting Treasurer, 1879; Treasurer, 1885;
Secretary of Board of Trustees, 1894-1914.

Bostwick, Charles Dibble, A.B., LL.B., Treasurer of the University, 1914;
Secretary of Board of Trustees, 1915.

General and Legal Assistant to the Treasurer, 1898; Assistant Treasurer, 1903.
Curtis, Charles Elbert, B.C.E., Superintendent of Buildings and Grounds, 1915.

Hoy, David Fletcher, B.S., M.S., Registrar, 1895. Assistant to the Registrar, 1891.

Patterson, Woodford, A.B., Secretary of the University and University Publisher, 1917.

Barbour, Elizabeth H., Warden of Sage College, 1909.

Nye, Gertrude Houston, Warden of Prudence Risley, 1913.

Tree, Thomas, Manager of Residential Halls, 1912. Assistant to the Treasurer, 1894.

Sutherland, Harriet, Superintendent of the Cornell Infirmary.

Munford, Samuel Archer, A.B., M.D., Medical Adviser for Men, 1915. (Absent on leave.)

Balderrey, Frank C., M.D., Assistant Medical Adviser for Men, 1917. (Absent on leave.)

Matzke, Edith H., M.D., Medical Adviser for Women, 1914. (Absent on leave.)
Adviser of Women, 1916-18.

Gordon, Edith H., M.D., Acting Medical Adviser for Women, 1918.

Harris, J. R., M.D., Acting Medical Adviser, 1918.

Kimpton, R., M.D., Assistant Medical Adviser, 1918.

Haight, H. W., M.D., Assistant Medical Adviser, 1918.

Sharpe, A. H., M.D., Assistant Medical Adviser, 1918.

Twisten, (Lieut.) Theodore Herman, Proctor of the University.

Cornell, Charles Ezra, Inspector.

NONRESIDENT LECTURERS, 1917-1918

Dr. Henry Van Dyke: Conscientious Objector: Fourth of July Type.

H. S. Perris: The War—As an Englishman Sees It.

Lieutenant Bruno Roselli: Italy and the War.

Charles Woods: The Bagdad Railway in the War.

Honorable Julius Kahn: Some American Problems.

Dr. R. Bruce Taylor: What War is Like.

Stephane Lauzanne: Fighting France.

Daniel A. Reed: Our Task at Home.

Major Ian Hay Beith: Carrying On.

Honorable William Howard Taft: The Great War.

Sir George Adam Smith: Great Britain's Share in the War.

**UNIVERSITY PREACHERS ON THE DEAN SAGE PREACHERSHIP
ENDOWMENT, 1917-1918**

- John R. Mott, LL.D., General Secretary, World's Student Christian Federation, New York City.
- The Rev. Francis G. Peabody, D.D., Harvard University, Cambridge, Massachusetts.
- The Rt. Rev. Ethelbert Talbot, D.D., Bishop of Bethlehem, South Bethlehem, Pennsylvania.
- The Rt. Rev. Charles Fiske, D.D., LL.D., Bishop Coadjutor of Central New York, Syracuse, New York.
- The Rev. Henry van Dyke, D.D., LL.D., Princeton, New Jersey.
- The Rev. Henry E. Cobb, Pastor West End Collegiate Church, New York City.
- The Rev. Cornelius Woelfkin, D.D., Pastor Fifth Avenue Baptist Church, New York City.
- The Rt. Rev. William A. Guerry, Bishop of South Carolina, Charleston, South Carolina.
- The Rev. Charles R. Brown, D.D., Dean of the School of Religion, Yale University, New Haven, Connecticut.
- The Rev. Wm. Fraser McDowell, D.D., Bishop of the Methodist Episcopal Church, Washington, D. C.
- The Rev. Samuel A. Eliot, D.D., President American Unitarian Association, Boston, Massachusetts.
- The Rev. Harvey Officer of the Order of the Holy Cross, West Park, New York.
- The Rev. C. Wallace Petty, Pastor Creston Avenue Baptist Church, New York City.
- The Rev. J. D. Adam, D.D., Hartford Theological Seminary, Hartford, Conn.
- The Rev. Charles A. Brown, Rector All Saints Church, Bayside Long Island.
- The Rev. James S. Williamson, D.D., S.T.D., Pastor Plymouth Church, New Haven, Connecticut.
- The Very Rev. S. S. Marquis, D.D., Dean of St. Paul's Cathedral, Detroit, Michigan.
- The Rev. Roger S. Forbes, Germantown, Pennsylvania.
- The Rev. Hugh Black, D.D., Union Theological Seminary, New York City.
- The Rev. R. Bruce Taylor, D.D., Principal Queen's University, Kingston, Ontario.
- The Rev. Lynn Harold Hough, D.D., Garrett Biblical Institute, Evanston, Illinois.
- Dr. E. W. Parsons, Rochester Theological Seminary, Rochester, New York.
- The Rev. John Wellington Hoag, Pastor Woodward Avenue Baptist Church, Detroit, Michigan.
- The Rev. William Pierson Merrill, D.D., Pastor Brick Presbyterian Church, New York City.
- The Rev. Malcolm James MacLeod, D.D., Pastor The Collegiate Church of St. Nicholas, New York City.
- The Rev. Edwin H. Hughes, D.D., LL.D., Bishop of the Methodist Episcopal Church, Boston Area, Malden, Massachusetts.
- Rabbi Stephen S. Wise, Ph.D., Free Synagogue, New York City.
- The Rev. W. J. Dawson, D.D., Pastor First Presbyterian Church, Newark, New Jersey.
- The Rev. Samuel V. V. Holmes, D.D., Pastor Westminster Church, Buffalo, New York.
- The Rev. Henry A. Stimson, D.D., Theological Seminary, Hartford, Connecticut.
- The Rev. Sir George Adam Smith, Principal Aberdeen University, Scotland.
- The Rev. James G. K. McClure, D.D., LL.D., President McCormick Theological Seminary, Chicago, Illinois. Baccalaureate Sermon.

ADMISSION TO THE UNDERGRADUATE COLLEGES

For admission to the Graduate School see p. 47; for admission to the Medical College see p. 96.

Applications for admission to any one of the undergraduate colleges of the University, except the Medical College, are entertained from the following three classes of persons: (a) those who desire to begin as freshmen, in some college of the University, a regular course of study leading to a degree conferred by that college; (b) those who, having already attended some institution of collegiate rank, desire to enter some college of the University; (c) those who desire to register as special students not candidates for a degree. The conditions of admission for these three classes of persons are separately described on pages 37 and 43.

The normal time for admission of students to the undergraduate colleges is at the beginning of the first term of the University year in September. For the admission of students at the beginning of the second term in February, see p. 40.

Every applicant for admission to any of the undergraduate curricula of the University, must file at the Registrar's office either a certificate of good moral character, or, in case he has previously attended some other college or university without graduating from it, a certificate of honorable dismissal from that institution.

ADMISSION OF FRESHMEN

Men who desire to begin as freshmen a curriculum leading to a degree in one of the colleges of the University, must be at least sixteen years of age. Women must be at least seventeen years of age. In the College of Law the minimum age for both men and women is eighteen years.

All the colleges of Cornell University conferring baccalaureate degrees presuppose, on the part of an applicant for admission, an amount of training equivalent to that gained by four years of successful work in a high school of good standing. The College of Law requires, in addition, the satisfactory completion of two years of study in a university or college of approved standing.

Scholastic Requirements

A student who applies for admission as a freshman to any college of Cornell University is required to offer fifteen units of entrance credit in subjects included in the following list of "Entrance Subjects." A "unit of entrance credit" is granted to a student who gives evidence that he has such knowledge of an entrance subject as should normally be acquired in five periods a week during one school year, or in 120 sixty-minute periods.

A. Requirements common to all the colleges (except the College of Law.)
Nine units. Of these fifteen units of entrance credit, nine units in the following subjects are required by each of the colleges: English, 3 units; history, 1 unit; mathematics, 2 units; one foreign language, 3 units. Applicants for admission to the College of Mechanical Engineering may offer two units in each of two foreign languages instead of three units in one foreign language.

B. Additional and, in some cases, specific requirements of the several colleges. Six units. In these six remaining units some of the colleges require that additional credits in some of the subjects in group A or credits in certain other subjects shall be included, while in other colleges, all of these remaining six units are elective, i. e., they may, with certain restrictions mentioned on p. 38, be selected by the candidate at will from the list of Entrance Subjects here printed.

Entrance Subjects

The subjects and the maximum and minimum amounts of credit in units that may be offered in each for admission to the University are:

1a. English 1	1½ unit,	8d. English History . . .	½ unit or 1 unit
1b. English 2	1½ unit	9a. Elementary Algebra . . .	1 unit
2a. First Year Greek	1 unit	9b. Intermed. Algebra	½ unit
2b. Second Year Greek	1 unit	9c. Advanced Algebra	½ unit
2c. Third Year Greek	1 unit	9d. Plane Geometry	1 unit
3a. First Year Latin	1 unit	9e. Solid Geometry	½ unit
3b. Second Year Latin	1 unit	9f. Plane Trigonometry	½ unit
3c. Third Year Latin	1 unit	9g. Spher. Trigonometry . . .	½ unit
3d. Fourth Year Latin	1 unit	10. Physics	1 unit
4a. First Year German	1 unit	11. Chemistry	1 unit
4b. Second Year German	1 unit	12. Phys. Geog.	½ unit or 1 unit
4c. Third Year German	1 unit	13. Biology	1 unit
5a. First Year French	1 unit	14. Botany	½ unit or 1 unit
5b. Second Year French	1 unit	14a. Zoology	½ unit or 1 unit
5c. Third Year French	1 unit	15. Bookkeeping	½ unit or 1 unit
6a. First Year Spanish	1 unit	16. Agriculture (including home economics, etc.)	½ unit to 4 units
6b. Second Year Spanish	1 unit	17. Drawing	½ unit or 1 unit
6c. Third Year Spanish	1 unit	18. Manual Training	1 unit
7a. First Year Italian	1 unit	19. { Any High School subject or subjects not already used	½ unit or 1 unit
7b. Second Year Italian	1 unit		
7c. Third Year Italian	1 unit		
8a. Ancient Hist.	½ unit or 1 unit		
8b. Modern Hist.	½ unit or 1 unit		
8c. Am. His. Civics . . .	½ unit or 1 unit		

In connection with the foreign language requirements, the following restrictions should be noted: 1. In those colleges where the requirement is 3 units, all of these units must be in a single language, except in the case of Mechanical Engineering (see page 39). Any number of elective units in a second language will be accepted. If the applicant offers at least 2 units in the second language, any number of units in a third language will be accepted. 2. In the College of Arts and Sciences where the requirement is 5 units, at least 3 of these units must be in one language and at least 2 units in a second language. Any number of elective units in a third language will be accepted.

If Biology (1 unit) is offered, neither Botany (½ unit) nor Zoology (½ unit) may be counted.

No part of No. 15 may be counted for entrance to Arts and Sciences except under No. 19; a maximum of one unit in Bookkeeping is allowed by all the other colleges with the exception of the College of Agriculture which permits a maximum of one unit to be counted with the restriction that it cannot be offered in conjunction with more than one of the following subjects: Agriculture, Drawing, Manual Training.

Agriculture may not be counted for entrance to Arts and Sciences or to Law. An applicant may offer for admission to Agriculture not to exceed four units in vocational subjects under numbers 16, 18, and 19 combined.

A student may not count under No. 19 work in subjects Nos. 1–18 until he has offered the maximum (e. g. 4 units of Latin; 3 units of English, Greek, German, French, Italian, or Spanish; 1 unit of Physics, Chemistry, or Manual Training) in Nos. 1–18.

In drawing and in manual training, three hundred actual hours are required for one unit of credit.

A candidate for admission who presents No. 19 in the list above as a part of the fifteen units required for entrance will not be allowed to take any examination for college credit at entrance, see page 43.

The following tabulation shows the subjects and credits required by the several colleges.

ENTRANCE REQUIREMENTS OF THE UNDERGRADUATE COLLEGES

ARTS AND SCIENCES		LAW 3 years	AGRICULTURE 4 years	VETERINARY 4 years	ARCHITECTURE		CIVIL AND MECH. ENG.	
A.B. 4 years	B.Chem. 4 years				4 years	4½ or 5 yrs.	4 years	4½ or 5 yrs.
English, 3	English, 3	A certificate that the applicant has met the entrance requirements and satisfactorily completed two years of study in a university or college of approved standing. (Only one year of such college work has heretofore been required, and applicants, who at the time they entered military or naval service could have satisfied that requirement, will in September, 1919, be admitted to the three-year Law Course, if by reason of such service they have been prevented from meeting the increased entrance requirement of two years of college work.)	English, 3	English, 3	English, 3	An applicant for admission to Architecture having at least 15 units of entrance credit but lacking some of the credits in entrance mathematics is advised to enter the 4½-year course at mid-year or the 5-year course in September and to take during his first year in the University along with other studies his entrance deficiencies for the 4-year course.	English, 3	An applicant for admission to Civil or Mechanical Engineering having at least 15 units of entrance credit but lacking some of the credits in entrance mathematics is advised to enter the 4½-year course at mid-year or the 5-year course in September and to take during his first year in the University along with other studies his entrance deficiencies for the 4-year course.
Foreign Languages, 5	French, 3 or German, 3		One Foreign Language, 3	One Foreign Language, 3	French, 3 or German, 3		One Foreign Language, 3	
History, 1	History, 1		History, 1	History, 1	History, 1 Physics, 1		History, 1	
Plane Geometry, 1	Plane Geometry, 1		Plane Geometry, 1	Plane Geometry, 1	Plane Geometry, 1		Plane Geometry, 1	
Elementary Algebra, 1	Elementary Algebra, 1		Elementary Algebra, 1	Elementary Algebra, 1	Elementary Algebra, 1		Elementary Algebra, 1	
	Intermed. Algebra, ½		[Solid Geom. and Pl. Trigonometry are not required but are strongly recommended for students intending to take Forestry or Landsc. Art.]	See Note	Intermed. Algebra, ½		Intermed. Algebra, ½	
	Solid Geometry, ½				Solid Geom., ½		Solid Geom., ½	
	Advanced Algebra, ½				Advanced Algebra, ½		Advanced Algebra, ½	
	Plane Trigonometry, ½				Plane Trigonom., ½		Plane Trigonom., ½	
Elective, 4	Elective, 4		Elective, 6	Elective, 6	Elective, 3		Elective, 4	
TOTAL, 15	TOTAL, 15		TOTAL, 15	TOTAL, 15	TOTAL, 15		TOTAL, 15	

Candidates for the degree of Bachelor of Chemistry are advised to include, among their entrance subjects, in addition to the full four units in mathematics, also three units of German and two units of French. Those who have not presented these subjects at admission will be required to take them in the University, which may result in the extension of their period of residence beyond eight terms. For the present, applicants will be admitted to the College of Arts and Sciences as candidates for the degree of Bachelor of Chemistry, upon satisfaction of the entrance requirements for the curriculum leading to the degree of Bachelor of Arts.

For admission to the New York State Veterinary College an applicant must offer a Veterinary Student Certificate issued by the Education Department of the State of New York, Albany, N. Y. This certificate satisfies the entrance requirement in full.

It is strongly recommended that for entrance to Architecture, Civil Engineering, and Mechanical Engineering, at least three of the four elective units be offered in language and history.

French or German is preferred for the three foreign language units required by the College of Civil Engineering, the College of Mechanical Engineering, the College of Agriculture, and the Veterinary College.

If an applicant wishes he may satisfy the foreign language requirement for entrance to Mechanical Engineering by two units in each of two foreign languages instead of three units in one foreign language.

Admission at the Beginning of the Second Term

Applicants who have fully satisfied the entrance requirements of the College of Arts and Sciences may be admitted as freshmen in that College at the beginning of the second term in February, as well as at the beginning of the first term in September. They will be able to make up a satisfactory schedule of work at the beginning of the second term, since freshman classes in the languages, history, mathematics, physics, chemistry, and zoology are begun at that time.

Applicants who have fully satisfied the entrance requirements of the College of Agriculture may be admitted as freshmen in that college at the beginning of the second term in February; they will, however, find it difficult to arrange satisfactory schedules and therefore should, if possible, enter in September.

Students who meet in full the requirements for admission as freshmen in either the four-year or five-year courses in the Colleges of Mechanical Engineering, of Civil Engineering, and of Architecture may enter said colleges at midyear to pursue courses which will be specially outlined to suit each individual case and which will lead to the degree of Mechanical Engineer, Civil Engineer, or Bachelor of Architecture at the end of four and a half years. Those who at this time meet the requirements for admission to the five-year course must enter the University classes in such of the mathematical courses required for admission to the four-year courses as have not been credited to them.

In order to secure admission at midyear with advanced standing in the regular four-year courses in the College of Mechanical Engineering, of Civil Engineering, and of Architecture, with the view of graduating in less than four years, the applicant must have attended an institution of collegiate rank and must secure credit for such university courses as will enable him, by attending during the remainder of the college year and (possibly) during the succeeding Summer Session, to substantially complete the year's work scheduled for the class he wishes to enter.

Students may not enter the College of Law at the beginning of the second term.

Students who desire admission at the beginning of the second term must place their certificates and credentials in the hands of the Registrar not later than January 15. For January entrance examinations, see page 41.

METHODS OF SATISFYING THE ENTRANCE REQUIREMENTS

Every applicant for admission must, by one of the four following methods, or by some combination of these methods, show that he possesses a satisfactory knowledge of the subjects that are required for admission to the particular college in which he plans to pursue his studies.

1. By passing the required Cornell University Entrance Examinations, see page 40.
2. By passing the College Entrance Examination Board Examinations in the required subjects, see page 41.
3. By passing the necessary Regents' Examinations (for students who have prepared in New York State), see page 41.
4. By presenting an acceptable school certificate, see page 42.

1. CORNELL UNIVERSITY ENTRANCE EXAMINATIONS

The Cornell University Entrance examinations assume in general that for each unit of entrance the student shall have such knowledge of the subject concerned as should normally be acquired in five periods a week during one school year, or in 120 sixty-minute periods. The entrance examination in English (total of three units) assumes four years of preparatory study.

Examinations for admission to the University are held in Ithaca, and all examinations except in drawing and in manual training and in certain subjects in agriculture and home economics, are held in New York City, First Avenue and 28th Street, in September, at the beginning of the first term of the University year. A fee of \$1 for each subject, with a maximum charge of \$5 for all subjects, must be paid by all candidates who take these examinations in New York City;

the fee must be paid a second time in the case of candidates who repeat the examinations. Permits to take the examinations must be secured from the Registrar in Ithaca. The University does not hold entrance examinations in the subjects included under number 19 of the list of entrance subjects, page 38.

No examinations of candidates for admission will be held by the University at any other times or places, except at the end of the first term at Ithaca. Permits to take the mid-year entrance examinations at Ithaca may be issued up to January 15 in each year upon the payment of \$1 for each subject to be taken with a maximum of \$5 for five or more subjects. In the case of applicants later than January 15 the Registrar may issue permits wherever possible. In this case the fee charged shall be double that charged prior to January 15.

A candidate may take all the entrance examinations in the same year, or he may divide them among two or three successive years.

For details concerning the subject matter of the University entrance examinations, the General Circular of Information should be consulted. Specimen copies of the September examination papers may be obtained by applying to the Secretary of the University.

2. COLLEGE ENTRANCE EXAMINATION BOARD EXAMINATIONS

The examinations held by the College Entrance Examination Board in June of each year are accepted as the full equivalents of the Cornell University Entrance Examinations in the corresponding subjects.

The next examinations of the College Entrance Examination Board will be held at Ithaca, and at various other places, June 16-21, 1919.

The examination fee at points in the United States and Canada is six dollars; at points outside of the United States and Canada, twenty dollars, for each candidate examined.

Those who wish to procure forms of application for examination, should address The College Entrance Examination Board, 431 West 117 Street, New York City.

3. ENTRANCE BY REGENTS' EXAMINATIONS

The Regents' examinations of the Education Department of the State of New York are accepted as the full equivalent of the Cornell University Entrance Examinations in the corresponding subjects.

The officially signed certificates or pass-cards (even for single subjects) issued by the Department of Education of the State of New York for passing Regents' examinations are accepted by Cornell University in all entrance subjects which are covered by such credentials.

The Arts College Entrance Diploma or the Science College Entrance Diploma satisfies in full the entrance requirements of the College of Arts and Sciences and of the College of Agriculture; either likewise satisfies the requirements for admission to the 4½-year and the 5-year curricula in Architecture, in Civil Engineering, and in Mechanical Engineering.

The Arts College Entrance Diploma or the Science College Entrance Diploma satisfies the requirements for admission to the four-year curriculum in Mechanical Engineering and in Civil Engineering provided the four entrance units required in mathematics are covered by the diploma or otherwise satisfied.

The Arts College Entrance Diploma or the Science College Entrance Diploma satisfies in full the entrance requirements to the four-year curriculum in Architecture provided the four entrance units required in mathematics, one in physics, and at least two in either French or German are covered by the diploma or otherwise satisfied.

The Department of Education, Albany, N. Y., will upon request issue to any student a statement showing all subjects passed to date. Apply to the Registrar for a blank for this purpose.

4. ENTRANCE BY SCHOOL CERTIFICATE

Certificates of work done in public or in private schools, in or out of the State may be accepted in lieu of passing entrance examinations, if the University authorities are satisfied with the standing of the school and if the applicant has completed a full regular course in the school and has been duly graduated after at least one year in the school.

The University does not engage in advance to accept the certificate of any school and the previous acceptance of certificates does not establish a permanent right to expect their further acceptance, but merely raises the presumption that similar certificates will be accepted.

Three separate steps must be taken before a student of any school will, on its certificate, be admitted to a college of Cornell University.

(a) The principal of the school must by formal application secure the certificate privilege for his school. (b) The principal of the school must submit a school certificate duly filled out for the individual candidate for admission. (c) The candidate himself must make application for admission to the particular college of Cornell University in which he intends to study. Official blanks for each of these purposes may be obtained from the Registrar of the University.

The school certificate should be forwarded by the principal as soon as possible after the graduation of the candidate. The application for the certificate privilege should, unless previously granted, accompany the school certificate. The candidate's application for admission to a particular college should be sent as early as possible after the candidate has decided in which college of Cornell University he desires to study. The application will be considered merely as a declaration of intention, and will impose no obligation upon the prospective student.

The school certificate should include all the subjects that the candidate has satisfactorily completed in the school, whether or not they are required by the particular college in which the candidate proposes to study; neglect to comply with this regulation may entail serious inconvenience and disappointment to the student. The school certificate may include subjects in which an examination has been passed for admission to the school. No additional or supplementary certificate will be considered after the first college term.

Certification for each unit of credit implies that the student has had five prepared recitations a week for one year of study in the subject. Two hours of laboratory work may be reckoned as equivalent to one hour of prepared recitation. If the candidate has not had five periods a week for one year in any subject but has had not less than 120 actual hours (7,200 minutes) of recitation in the subject, the school may if it desires recommend him for one unit of credit, but the school certificate must show the exact number of actual hours of recitation in the subject.

Notebooks in general need not be submitted and should not be sent unless they are in individual cases specifically requested by the Registrar.

Subjects in which work has been done privately outside of the regular school curriculum, even if under the direction of teachers in the school, should not be included in the certificate.

If in any entrance subject a student has failed to pass the Cornell or any other University Entrance Examination, or the College Board Entrance Examination, or the Regents' examination, he will not thereafter be allowed to offer a school certificate in that subject, unless subsequently to his failure, he shall have pursued the subject regularly in class for the full time required, and shall have done the full amount of work required for entrance in the subject.

Admission on school certificates is in all cases provisional. If, after admission to the University, a student fails in any subject dependent upon an entrance subject for which a school certificate has been accepted, credit for that entrance subject may be cancelled.

All communications and requests in connection with admission by school certificate should be addressed to the Registrar of the University. The University will welcome any special or personal information that school principals may care to furnish in connection with individual applicants for admission.

COLLEGE CREDIT AT ENTRANCE**For Surplus Entrance**

Credit towards a degree for work done in a preparatory school, upon subjects (Nos. 1-18, incl.) which may be offered for entrance to the University, will be given only to those students who, in addition to satisfying all entrance requirements, pass separate examinations in the subjects for which they seek college credit. These examinations will cover substantially the same ground as do the University courses in the corresponding subjects. An applicant who desires a college credit examination must apply to the Registrar not later than the day preceding the beginning of the entrance examinations, specifying which fifteen units he intends to offer in satisfaction of the entrance requirements, and upon what other entrance subjects he wishes to be examined for college credit.

In case he fails to satisfy the entrance requirements in any one or more of the subjects which he has offered for entrance, but passes the college credit examination in any other subject or subjects, he may use the latter for satisfying the entrance requirements, but in that case he cannot also receive college credit therefor. The college credit examinations will be held in September, on the date set for the entrance examinations in the same subjects.

A candidate using No. 19 in the list of Entrance Subjects (see page 38) to complete the required fifteen units may not apply for an examination for college credit.

ADMISSION OF SPECIAL STUDENTS

A person, ordinarily one of considerable maturity, may under certain circumstances, even without satisfying the entrance requirements, be admitted to one of the colleges of Cornell University as a special student not a candidate for a degree. The applicant must give evidence of ability to do creditable work in the college and his application for admission must be recommended by the department in which he proposes to do the main part of his work.

If a person admitted as a special student without satisfying the entrance requirements subsequently satisfies these requirements, he may be graduated under the ordinary regulations of the particular college in which he is studying. He will not be permitted, however, to make up deficiencies in entrance subjects by attending University instruction in those subjects.

Candidates for admission as special students must file their applications directly with the dean of the particular college in which they propose to study.

Special students in the College of Arts and Sciences must be at least twenty-three years of age; in the College of Law, in the College of Architecture, and in Sibley College, twenty-one years of age.

The College of Civil Engineering admits as special students persons at least twenty-one years of age who are college graduates and who intend to pursue advanced work without being candidates for a degree. The Sibley College of Mechanical Engineering requires that its special students shall have had engineering experience and the equivalent of the mathematics specified for the admission of regular students.

Special students in the College of Agriculture must have had two full years of recent farm experience and, unless they can satisfy all the entrance requirements for the regular course, must be at least twenty-one years of age.

ADMISSION FROM OTHER COLLEGES

A student who, having already attended a college or a university, desires to be admitted as a candidate for a degree to a college of Cornell University, should file with the Registrar of Cornell University, on an official blank to be obtained from him, a formal application for admission to the college of the University along with an official certificate from the college or university which he has already attended, giving evidence of (1) his honorable dismissal, (2) his entrance examinations in detail, (3) his terms of attendance and the amount of work that he has completed, and (4) a detailed statement of the courses pursued. He should send also a catalogue of the institution, writing on it his name and marking the

entrance requirements which he has satisfied and each subject which he has completed. All applicants for admission from other colleges should consult the special announcement of the college of Cornell University in which they propose to study.

PAYMENTS TO THE UNIVERSITY*

TUITION

Regular Year	\$150
Third Term in Agriculture	75
Summer Session	30
Summer School in Agriculture	30†
Winter Courses in Agriculture	25†

Students upon registering become liable for the tuition fee for the term.

The tuition fee is payable in installments of \$85 at the beginning of the first term and \$65 at the beginning of the second term. In the Medical College in New York City the entire fee is payable at the beginning of the year.

The tuition fee for any term may be refunded to any student who, for reasons satisfactory to the Comptroller and the Registrar, withdraws within twenty days after the first registration day.

A student who withdraws from the University, for reasons satisfactory to the Comptroller and the Registrar, on or before November 15 or April 1, may have refunded one-half of the tuition fee for the current term.

Students registering after December 1 pay for the remainder of the first term two-thirds of the tuition fee for the first term. Students registering after April 1 pay for the remainder of the second term two-thirds of the tuition fee for the second term.

Free Tuition. Tuition is free to students who hold New York State Tuition Scholarships.

Students pursuing full, special, and short courses in the State Agricultural and Veterinary Colleges who at the beginning of the college year are and for at least twelve months prior thereto have been bona fide residents of the State of New York, shall be exempt from payment of tuition fees, provided, however, that no student shall be allowed to transfer from any such course to another course where tuition is charged without first paying the regular tuition fees for the hours for which he may receive credit in the latter course.

Tuition is free to graduate students for work in the State colleges. For each Graduate School minor subject taken outside the State colleges, when the major subject is taken in the State colleges, one-sixth of the regular tuition rate will be charged. For each Graduate School minor taken in the State colleges by students whose major subject is in another college, one-sixth of the regular tuition rate will be deducted. Tuition is free to holders of University fellowships or graduate scholarships.

No student will receive the Master's degree who has not paid tuition for at least one full year, and no one will receive the doctor's degree who has not paid full tuition for at least three years, unless one or more of these years have been spent in graduate study at another University.

Members of the instructing staff registered in the Graduate School and having their major subject in the college or line of work in which they are instructing, or already having a degree and registered for work leading to the first degree in the college in which they are instructing, shall be exempt from the payment of tuition, and from the payment of laboratory and shop fees in the department in which they are employed to give instruction. Members of the instructing staff taking

*During the year 1918-1919 the time for payment and the amount of the term tuition and fees were changed for the year to conform to the changes in the number and length of the terms.

†Tuition is free to students in the Winter Courses in Agriculture who for one year immediately preceding have been bona fide residents of New York State. For provisions governing free tuition in the Summer School in Agriculture, see the special announcement of the University Summer Session.

work for which they are not entitled to free tuition shall be charged tuition in proportion to the amount of work for which they are registered.

All tuition and other fees may be changed by the Trustees to take effect at any time without previous notice.

OTHER FEES

A matriculation fee of \$5 is charged all students on entering the University.

A registration fee of \$5 is charged each student registering for the first time in the Summer Session.

Every student (except those registered in the Medical College in New York City) is charged an Infirmary fee of \$3 a term, payable at the beginning of each term. Students in the winter courses in Agriculture, are required to pay the Infirmary fee for one term. In return for the Infirmary fee, any student who is ill, is on his physician's certificate admitted to the Infirmary, and is given without further charge a bed in a ward, board, and ordinary nursing, for a period not exceeding two weeks in any one academic year.

Extra charges are made for private rooms, special food, and special nurses. If an ill student who has not received two weeks' service in the year is refused admittance to the Infirmary, by reason of lack of accommodation, or if he is not cared for elsewhere by the University, he is entitled to a refund of the fee for both terms.

Students in the University Summer Session and in the Summer School in Agriculture have all the privileges of admission to the infirmary. They pay no fee in advance, but are liable for regular charges for services rendered.

For medical advice, see page 164.

Each male undergraduate student registered in the University shall be charged a locker fee of \$2 a term, which locker fee shall cover the use of a locker in the University gymnasiums, or in the State Drill Hall, or in Schoellkopf Memorial Building with the use of bathing facilities and towels therein and the use of the Cornell University gymnasiums and play grounds.

Students registered in Sibley College or in the College of Civil Engineering are charged \$12.50 a term for material used in College shops and laboratories; students not registered in Sibley College but taking work in the Sibley shops are charged at the rate of \$3.50 a record hour. A student who has taken while in a non-engineering college of this University part of the work required for an engineering degree shall, before receiving the technical degree, be required to pay to the University Treasurer such amount as would have been necessary if all such work had been taken while registered in the engineering college.

A fee of \$5 a term is required of students registered in Architecture for materials used in the draft rooms and laboratories. Students not registered in Architecture but taking work in design or drawing from life, must pay a fee of \$5 a term; for other courses in drawing or modelling \$2.50 a term.

A graduation fee of \$10 is required of each person taking a first or undergraduate degree, and one of \$20 of each person taking an advanced degree. When the degree is to be conferred at Commencement, this fee must be paid at least ten days prior to Commencement Day. When the degree is to be conferred at another time than Commencement (September or February), the graduation fee must be paid at least ten days prior to the date on which it is to be conferred. The amount paid will be refunded should the degree not be conferred.

Every person taking laboratory work or courses where a fee is charged must pay to the Treasurer the required fee or the required deposit for the materials, etc., to be used in the work. Members of the instructing staff who are registered in the graduate school shall be exempt from the payment of the laboratory and shop fees, in courses taken or in research pursued in the department in which they are employed to give instruction.

All students in the University are held responsible for any injury done by them to its property.

A student who fails to pay his indebtedness to the University within twenty days after the last registration day for the term will be dropped from the University.

For reasons satisfactory to the Comptroller and the Registrar any of the following mentioned fees may be waived in any individual case upon recommendation of the Dean of the college concerned, if in his judgment the student's failure to comply with the regulation was due to ill health or to any other reason beyond his control.

A student desiring to be reinstated after having been dropped from the University for delinquency in scholarship or conduct shall first pay a fee of \$25.

A matriculated student desiring to register after the close of Registration Day shall first pay a fee of \$5.

A student desiring to file his registration of studies after the date set by his college for filing the same shall pay a fee of \$2.

A student desiring to take an examination or other test for the removal of a term condition (including the making up of a mark of "absent" or "incomplete") shall first pay a fee of \$2 for each examination or other test.

A student desiring to continue his University work after having been absent without excuse from his Dean from any class or exercise occurring during the two days immediately preceding or immediately following the Thanksgiving, the Christmas, or the Easter Recess, shall pay a fee of \$5 for each day on which an absence occurred.

Students in the Graduate School are exempt from the fines imposed for late registration and for absence before and after vacation periods.

EXPENSES

- A student's expenses at Cornell, beyond the stated University fees and a small outlay for books and instruments, depend in large measure on his personal tastes and habits. His expenses, other than those for board and room, may be estimated at the normal rate prevailing throughout that section of the country in which Ithaca is situated.

Parents and guardians are earnestly cautioned against providing their sons and wards with an excessive amount of pocket money. Many young men have been fatally handicapped in their university careers by overindulgence in this respect.

THE GRADUATE SCHOOL

The purpose of the Graduate School, which has exclusive control of all graduate work carried on in the University, is to provide the student with the method and discipline of original research, to the ultimate end that he may contribute to the advancement of knowledge. In furnishing this opportunity for independent study and investigation, the Graduate School seeks to make the conditions such as will enable the student to devote himself wholly to his chosen field. Unhampered by the restrictions that necessarily obtain in undergraduate work, he will come into freedom of association with older scholars, who will seek to make his work profitable to him by giving such aid and direction as he may need.

All courses of study offered in the University, and all the facilities for study and investigation afforded by its libraries and laboratories, are open to students in the Graduate School, subject only to the condition of their being qualified by previous study or experience to undertake the particular work desired.

The Faculty of the Graduate School is composed of those professors, assistant professors, and instructors who are, as members of special committees, engaged in supervising the work of graduate students.

ADMISSION

Graduates of the following colleges of Cornell University, namely, the College of Arts and Sciences, the Medical College, the College of Architecture, the College of Civil Engineering, the Sibley College of Mechanical Engineering, the Veterinary College, and the College of Agriculture, and graduates of other institutions in which the requirements for the first degree are substantially equivalent, are eligible for admission to the Graduate School. In other cases, studies pursued after graduation and experience gained by professional work or otherwise are taken into consideration in deciding whether the candidate's preparation as a whole is such as to justify his admission to the Graduate School. Graduates of colleges other than those of Cornell University may be admitted to the Graduate School, but not to candidacy for an advanced degree, in cases where their training is regarded as less than one year short of that required for the first degree at Cornell University.

Seniors in the colleges of Cornell University who have completed the work required for the Bachelor's degree may, under certain conditions to be ascertained from the deans of their respective colleges, be admitted to the Graduate School.

CANDIDACY FOR AN ADVANCED DEGREE

A student is admitted as a candidate for an advanced degree when he has satisfied the Faculty, and especially the professors with whom he intends to work, that both his general preparation and his preliminary work in his specialty are satisfactory in kind and sufficient in amount. For a student who has been admitted to candidacy for an advanced degree, the minimum time of residence for the Master's degree is one year, and for the Doctor's degree three years, provided that the work accomplished during that time is satisfactory.

Not all students admitted to the Graduate School may expect to obtain a degree at the end of the minimum period of residence. A student whose undergraduate work has been insufficient in amount or too narrowly specialized, or whose preparation in his special field is inadequate, must count upon spending some time, in addition to the minimum residence requirement, in work of a less advanced character. The minimum residence requirement, applies only to graduates of a four-year curriculum in some college of Cornell University, and to graduates of other institutions who have pursued an equivalent course of study.

The branch of knowledge to which the student intends to devote the larger part of his time is termed his major subject. The other fields of study selected, which will be necessarily more restricted in their scope and which should in general be selected with reference to their direct bearing upon the major subject,

are termed the minor subjects. Candidates for the Doctor's degree are required to select a major subject and two minor subjects: for the Master's degree, a major subject and one minor subject are required.

The work of each candidate for an advanced degree is in charge of a committee consisting of two or more professors under whom his major and minor subjects are pursued, the professor of his major subject being chairman.

Examinations for an advanced degree may be either oral or written, or both, at the option of the examining committee, and are open to all members of the Faculty.

THE DEGREE OF DOCTOR OF PHILOSOPHY

The degree of Doctor of Philosophy is granted to a student who, after completing not less than three years of resident graduate work, presents a satisfactory thesis, and passes an examination on his major and minor subjects and on the subject matter of his thesis. Each candidate for the Doctor's degree must deposit one hundred printed copies of his thesis with the Dean for the use of the University Library.

The Doctor's degree is intended to represent not a specified amount of work covering a specified time, but long study and high attainment in a special field, proved in the first place by the presentation of a thesis which displays the power of independent investigation, and in the second place by passing corresponding examinations upon the ground covered by the major and minor subjects chosen at the beginning of the candidacy. The standard for the Doctor's degree is determined by the attainment to be expected of an excellent student who begins his work with adequate preparation, and devotes his whole time for three years to his major and minor subjects and to his thesis.

Candidates for the Doctor's degree will ordinarily be expected to have a working knowledge of French and German before beginning graduate work; and in all cases they must, before beginning their second year of residence, show to the satisfaction of their special committees that they possess a reading knowledge of these languages. If the subjects chosen by the candidate are of such character as to make it desirable that he should be familiar with some foreign language other than French and German, the special committee may, with the consent of the Dean, permit the substitution of that language for one of the two required.

The thesis for the Doctor's degree must be of such character as shall demonstrate the candidate's ability to do original work, and in respect of style and composition must be approved by the General Committee of the Graduate School or by some member of the Faculty who has been designated by the General Committee.

THE MASTER'S DEGREE

Cornell University confers the degrees of Master of Arts, Master of Science, Master of Architecture, Master of Civil Engineering, Master of Mechanical Engineering, Master in Forestry, Master in Landscape Design, and Master of Science in Agriculture.

After admission to candidacy for the degree, the student must spend at least one year in residence at this University and must pursue under the direction of his special committee, a course of advanced study including one major and one minor subject.

Each candidate must present a thesis, or essay, as the chairman of his special committee may decide, which shall demonstrate his ability to do independent work, and which shall be acceptable in style and composition. He must then pass an examination on his major and his minor subject and on the subject matter of his thesis.

GRADUATE WORK IN THE SUMMER

Graduate work may be pursued during the summer by: (a) a student who is registered in the Graduate School and also in the University Summer Session; (b) a student who is registered in the Graduate School and also in the third term

of the College of Agriculture; (c) a student who is registered only in the Graduate School and is working under the direction of a member of his special committee.

Work done in the Summer Session of Cornell University, under the direction of a member of the Faculty of the Graduate School, may be counted for residence toward the Master's degree. Two Summer Sessions are considered as one term of residence, four Summer Sessions as two terms.

The third term in the College of Agriculture is accepted for purposes of graduate residence as the equivalent of one of the regular terms of the year; but no candidate for the Doctor's degree will be allowed to receive credit for more than two terms of residence during any period of twelve months.

Members of the Faculty of the Graduate School wishing to direct during the summer months the studies of graduate students who are registered neither in the summer session nor in the third term in Agriculture may obtain authorization for such work by making application to the General Committee not later than May 1 of each year. Students who have already completed at least a full year of graduate work as candidates for an advanced degree, either in this University or in some institution whose graduate work is acceptable, may receive residence credit for work thus authorized. But no candidate for the Doctor's degree will receive credit for more than two terms of residence during any twelve consecutive months.

FELLOWSHIPS AND GRADUATE SCHOLARSHIPS

The following twenty-five fellowships are annually offered in the Graduate School:

1. The Cornell Fellowship in English.
2. The McGraw Fellowship in Civil Engineering.
3. The Sage Fellowship in Chemistry.
4. The Schuyler Fellowship in Physiology; Vertebrate Zoology, including Anatomy and Histology and Embryology; or Invertebrate Zoology and Entomology.
5. The Sibley Fellowship in Mechanical and Electrical Engineering.
6. The Goldwin Smith Fellowship in Botany; Geology; or Physical Geography.
7. The President White Fellowship in Physics.
8. The Erastus Brooks Fellowship in Mathematics.
9. The University Fellowship in Architecture.
10. The University Fellowship in Romance Languages.
11. The University Fellowship in German.
12. The University Fellowship in Agriculture or in Veterinary Science.
13. The University Fellowship in Mechanical and Electrical Engineering.
14. The President White Fellowship in Modern History.
15. The President White Fellowship in Political and Social Science.
- 16-17. The Susan Linn Sage Fellowships in Philosophy.
18. The Susan Linn Sage Fellowship in Psychology.
- 19-20. The Fellowships in Political Economy.
- 21-22. The Fellowships in Greek and Latin.
23. The Fellowship in American History.
24. The Edgar J. Meyer Memorial Fellowship in Engineering Research.

The President White Fellowships in Modern History and in Political and Social Science have an annual value of \$500 each; the others have an annual value of \$400 each. All Fellows are also exempt from tuition.

The following seventeen graduate scholarships are annually offered in the Graduate School:

- 1-5. The Susan Linn Sage Graduate Scholarships in Philosophy.
6. The Susan Linn Sage Graduate Scholarship in Psychology.
7. The Graduate Scholarship in Mathematics.
8. The Graduate Scholarship in Chemistry.
9. The Graduate Scholarship in Physics.
10. The Graduate Scholarship in Civil Engineering.

11. The Graduate Scholarship in Latin and Greek.
12. The Graduate Scholarship in Archæology and Comparative Philology.
13. The Graduate Scholarship in Physiology: Vertebrate Zoology, including Anatomy and Histology and Embryology: or Invertebrate Zoology and Entomology.
14. The Graduate Scholarship in Botany: Geology; or Physical Geography.
15. The Graduate Scholarship in English. .
16. The Graduate Scholarship in History.
17. The Graduate Scholarship in Architecture.

The graduate scholarships, with the exception of the scholarship in Architecture, have an annual value of \$200 each. Holders of graduate scholarships are also exempt from tuition. The graduate scholarship in Architecture grants only free tuition.

Official forms for submitting applications for fellowships and graduate scholarships may be obtained from the Dean of the Graduate School. All applications must be submitted to him on or before March 15 of the academic year preceding the one for which application is made. Before this application is filed, the applicant should have convinced himself by correspondence with the Dean that he is eligible for admission to the Graduate School of this University in full standing, since appointments are made only to those who are eligible for admission to candidacy for an advanced degree.

The term of each fellowship and graduate scholarship is one year; but the term may under exceptional circumstances be extended to two years.

All persons elected to fellowships and graduate scholarships are required, upon accepting their appointments, to file a bond that, in case of their resignation before the expiration of the time for which they were appointed, they will repay to the University any sums that they may have received.

The President White Fellowships in History and Political Science, may in the discretion of the Faculty of the Graduate School, be made travelling fellowships. In the case of a student of very exceptional ability and promise in the field of either of these fellowships, the two fellowships may, in the discretion of the Faculty, be combined for a single year into one.

Honorary Fellowships

Persons upon whom the Doctor's degree has already been conferred may, in the discretion of the Faculty of the Graduate School, be appointed to honorary fellowships. These fellowships cover all fees except laboratory charges. Actual residence at the University and regular registration in the Graduate School are required of all appointees.

GRADUATE PRIZE IN PHILOSOPHY

A Graduate Prize in Philosophy of the annual value of about \$25, is open for competition to all students registered in the Graduate School. The prize will be awarded to the graduate student who submits the best paper embodying the results of research in the field of philosophy.

For tuition and fees in the Graduate School see page 44.

GRADUATE STUDENTS, 1918-1919

†Not a candidate for a degree. ††Seniors who had completed the requirements for the baccalaureate degree (except in some cases the residence requirement) but were admitted to the Graduate School before the degree was actually conferred.

Adams, Katherine Rogers, A.B. (Wellesley) 1911, English Literature, Medieval History (Cooper, Burr)	Ithaca A.M.
Allen, Charles Loring, A.B. 1916, Animal Husbandry, Farm Management (Wing, Warren)	Brodhead M.S. in Agr.
Allen, Howard Bushnell, B.S. 1914, Rural Education, Farm Management (Lusk, Livermore)	Hamburg M.S.
Anderson, Juliette Norma, B.S. (Oregon State Agr.) 1918, Plant Pathology, Mycology, Cytology (Whetzel, Fitzpatrick, Sharp)	Portland, Ore. Ph.D.
Atterbury, Mrs. Ruth Rand, A.B. (Wellesley) 1916; A.M. (Cornell) 1917, Histology, Physiology, Anatomy (Kingsbury, Simpson, Stockard)	Brooklyn Ph.D.
Auer, J. A. C. Fagginger (Univ. of Amsterdam), 1906, Logic and Metaphysics, Ethics, History (Creighton, Hammond, Thilly, Burr)	Ithaca Ph.D.
Babor, Rudolph J., B.S. 1918, Entered Military Service.	New York City
Bache-Wiig, Sara, A.B. (Smith), 1918, Pomology, Plant Pathology (Chandler, Hesler)	So. Portland, Me. M.S.
Bailey, Dixon Lloyd, B.A. (Queen's University) 1918, Plant Pathology, Plant Histology, Organic Chemistry (Whetzel, Eames, Orndorff)	Winchester, Canada Ph.D.
Banner, Erford Lynn, B.S. 1915; M.S. in Agr. 1916, Poultry Husbandry, Embryology, Rural Education (Rice, Kingsbury, Works)	Bainbridge Ph.D.
Barstow, Mary Eleanor, A.B. 1918, Economic Theory, Economic History, Social Science (Davenport, Usher, Willcox)	Ithaca Ph.D.
Bechtel, Albert Reiff, B.S. (Pennsylvania) 1912; M.A. (Same) 1912, Taxonomic and Ecological Botany, Plant Pathology, Floriculture (Wiegand, Fitzpatrick, White)	Royersford, Pa. Ph.D.
Bedient, Harold Arthur, A.B. (Albion) 1916, Organic Chemistry, Sanitary Chemistry, Bacteriology (Orndorff, Chamot, Moore)	Albion, Mich. Ph.D.
Bell, Vivian Irene, A.B. (Smith) 1918 Sociology, Psychology (Willcox, Weld)	Waverly A.M.
Benson, John Phineus, B.S. (Utah Agr.) 1915, Plant Physiology, Soil Technology, Physical Chemistry (Knudson, Curtis, Bizzell, Briggs)	Logan, Utah Ph.D.
Bellows, Margaret, B.A. (Wells) 1917, Chemistry, Pathology and Bacteriology (Dennis, Moore)	Brooklyn A.M.
Black, Russell Van Nest, B.S. 1916, Landscape Design, Plant Materials (Davis, Curtis)	Hightstown, N. J. M.L.D.
Blake, Marion Elizabeth, B.A. (Mt. Holyoke) 1913; A.M. (Cornell) 1918, Latin, Greek, Greek Archaeology (Bennett, Bristol, Andrews)	New Haven, Conn. Ph.D.
†Bleiman, Gladys Katherine, A.B. 1919 Philosophy, Ethics (Creighton, Thilly)	New York City A.M.
Bodansky, Aaron, B.S. 1915, Biochemistry, Physiology, Pathology (Sumner, Simpson, Moore)	New York City Ph.D.
Booth, Harold Simmons, A.B. (Western Reserve) 1915; A.M. (same) 1916, Inorganic Chemistry, Physical Chemistry, Physics (Browne, Bancroft, Briggs, Nichols)	Cleveland, Ohio Ph.D.
Branch, Hazel E., A.B. (Kansas) 1908; A.M. (same) 1912, Insect Morphology, Systematic Entomology, Zoology (Johannsen, Needham, Bradley, Reed)	Wichita, Kan. Ph.D.
Butler, Anne Louise, A.B. (Middlebury) 1910, American History, Medieval History, American Literature (Hull, Burr, Prescott)	Proctor, Vermont Ph.D.
Carpenter, Charles Milton, D.V.M. 1917, Veterinary Bacteriology, Obstetrics (Moore, Williams)	Unadilla M.S.
Chasman, Israel, B.A. (Texas) 1916; M.A. (same) 1918, History of Philosophy, Ethics, English (Creighton, Hammond, Thilly, Adams)	San Antonio, Texas Ph.D.
Chwang, I. Kwei, A.T.E.C'. (Tangshan Eng.) 1917, Railroad and Highway Engineering, Electricity in Mining (Barnes, Karapetoff)	Tientsin, China M.C.E.
Collins, Jacob Roland, B.S. (Ohio Univ.) 1912; M.S. (Purdue) 1914, Experimental Physics, Alternating Currents, Mathematics (Gibbs, Bedell, Hurwitz)	Ithaca Ph.D.
Collins, Marie Taylor, A.B. (Wellesley) 1913; A.M. (Kansas) 1914, Logic and Metaphysics, Ethics, Psychology (Creighton, Thilly, Hammond, Weld)	Kansas City, Mo. Ph.D.
Colony, Myron Wesley, B.Chem. 1918, Physical Chemistry, Organic Chemistry, Economic Geology (Briggs, Orndorff, Ries)	Bronxville Ph.D.
Conner, Helen Margaret, A.B. (Indiana State Normal), 1911; A.M. (Indiana) 1912, Latin, Elizabethan Literature, Old English (Bennett, Adams, Monroe)	Terre Haute, Ind. Ph.D.
Cornwell, Ralph Thomas Kline, B.Chem. 1918, Organic Chemistry, Physical Chemistry, Chemical Microscopy (Orndorff, Briggs, Chamot)	Northumberland, Pa. Ph.D.
Cramer, Earnest Faville, B.S. in Agr. (Iowa State) 1915, Rural Education, Rural Economy (Works, Lusk, Lauman)	Red Oak, Ia. M.S. in Agr.
†Curtiss, Leon Francis, A.B. 1917, [Adviser: Gibbs.]	Ithaca

- Davis, Henry Kennedy, A.B., 1912; A.M. 1914,
Anatomy, Physiology, Histology and Embryology (Kerr, Simpson) St. Johnsville
Died October 1918
Detweiler, John D., B.A. (Queen's University) 1912; M.A. (same) 1913, Kitchener, Ont.
Economic Entomology, Morphological Entomology, Zoology (Herrick, Johannsen, Reed) Ph.D.
- Dolve, Robert Martinus, B.S. in M.E. (North Dakota Agr. College) 1905, Agricultural College, N. D.
Experimental Engineering, Industrial Engineering (Sawdon, Kimball) M.S.
Douglas, Frank William, A.B. (Albion) 1905; A.M. (Michigan), 1908, Albion, Mich.
Inorganic Chemistry, Analytical Chemistry, Sanitary Chemistry (Dennis, Browne, Chamot) Ph.D.
- Downs, Paul Andrew, B.S. (Conn. Agr.) 1918, Ithaca
Dairy Industry, Agricultural Chemistry (Stocking, Cross) M.S.
Dye, Harry Wilmer, B.S. (Wisconsin) 1915; M.S. in Agr. 1916, New Matamoras, Ohio
Plant Pathology, Plant Breeding, Plant Physiology (Whetzel, Emerson, Knudson) Ph.D.
- Dye, J. Alma, A.B. (Brigham Young) 1916, Basalt, Idaho
Human Physiology, Biochemistry, Bacteriology (Dresbach, Simpson, Sumner, Moore) Ph.D.
Dynes, Oliver Wesley, B.S. (N. Dak. Agr.) 1907; M.S. in Agr. (Cornell) 1912, Fargo, N. D.
Farm Crops, Plant Breeding, Soils (Montgomery, Love, Emerson, Bizzell) Ph.D.
- †Eaton, Henry Nelson, A.B. (Colgate) 1904; A.M. (Harvard) 1906; Ph.D. (U. of Pittsburgh) 1912, Ithaca
[Adviser: G. D. Harris.]
- Edmonson, Ellen, A.B. (Kansas) 1918, Newton, Kan.
Insect Ecology, Drawing (Needham, Brauner) A.M.
- Eveleth, Emily, A.B. (Tufts) 1914, Little Falls
Entomology, Botany (Needham, Wiegand) A.M.
- Eyster, Lewis A., A.B. (Bucknell) 1917, Fisher's Ferry, Pa.
Plant Breeding, Systematic Botany (Hutchison, Wiegand) A.M.
- Eyster, William Henry, A.B. (Bucknell) 1914; A.M. (same) Cortland
Plant Breeding, Plant Histology, Systematic Botany (Emerson, Eames, Rowlee, Stoneman) Ph.D.
- Fisher, Mary Jones, A.B. 1906; A.M. 1916, Denton, Md.
Plant Anatomy, Animal Morphology, Biology (Eames, Reed, Needham) Ph.D.
- Flockhart, Marguerite Craig, A.B. 1918, Newark, N. J.
European History, English Literature (Bretz, Northup) A.M.
- †Francis, William Carson, B.S. (Columbia) 1907, Buffalo
[Adviser: Dennis.]
- Frost, Walter Sprague, B.S. (Tufts) 1912, Ithaca
Inorganic Chemistry, Agricultural Chemistry, Soil Technology (Browne, Cross, Bizzell) Ph.D.
- Gamble, Dean Le Fever, B.S. 1916, Ithaca
Comparative Anatomy, Ornithology, Plant Anatomy (Reed, Allen, Eames) Ph.D.
- Gentry, Charles Burt, S.B. in Ed. (Chicago) 1912, Springfield, Mo.
Rural Education, Farm Management (Works, Warren) M.S.
- Gibbons, Lois Oliphant, A.B. (Michigan), 1912; M.A. (Pennsylvania) 1914, Philadelphia, Pa.
Medieval History, English History, German Literature (Burr, Sweet, Pope) Ph.D.
- †Gillett, Mrs. Gertrude Nelson, B.S. 1916, Ithaca
[Adviser: Miss Henry.]
- Gillett, Roy Lewis, B.S. 1917, Colden
Farm Management, Economics, Soils (Livermore, Warren, Davenport, Bizzell) Ph.D.
- Gorham, Alexander Campbell, B.S.A. (McGill) 1913, MacDonald College, Can.
Pomology, Plant Physiology (Heinicke, Curtis) M.S. in Agr.
- †Gottschalk, Louis, A.B. 1918, Brooklyn, N. Y.
[Adviser: N. Schmidt.]
- Griswold, Grace H., B.S. 1918, Grand Rapids, Mich.
Landscape Art, Economic Entomology (Curtis, Herrick) M.L.D.
- Gustafson, Axel Ferdinand, B.S. (Illinois) 1907; M.S. (same) 1912, Aledo, Ill.
Soil Technology, Physical Chemistry, Physical Geography and Economic Entomology (Lyon, Briggs, Von Engeln, Ries) Ph.D.
- Haines, George, B.S. 1917; M.S. in Agr. 1918, Pleasantville
Animal Husbandry, Pathology and Bacteriology, Veterinary Physiology (Harper, Moore, Hayden) Ph.D.
- Harris, Marjorie Silliman, B.A. (Mt. Holyoke) 1913, Wethersfield, Conn.
Logic and Methaphysics, Ethics, Education (Creighton, Albee, Hammond, Thilly, Ogden) Ph.D.
- Hausman, Leon Augustus, A.B. 1914; A.M. 1916, Ithaca
Comparative Morphology, Entomology, Physical Geography (Reed, Johannsen, von Engeln) Ph.D.
- †Healey, Lolita Evelyn, A.B. (Radcliffe) 1913, Ithaca
[Adviser: Miss F. Rose.]
- Hedger, George Andrews, A.B. (Utah) 1906, Salt Lake City, Utah
Modern European History, Political Science, American History (Becker, Orth, Hull) Ph.D.
- Hieber, Evelyn, A.B. 1918, Utica
Analytical Chemistry, Physical Chemistry (Dennis, Briggs) A.M.
- Hilmer, Hermann, A.B. (Michigan) 1904; A.M. (Columbia) 1905; Ph.D. (Stanford) 1912, Ithaca
Economic Theory, Finance, Social Science, (Davenport, Reed, Wilcox) Ph.D.
- Ho, Yun Huang, A.B. 1917, Wushang, China
Mathematical Analysis, Geometry, Physics (Hurwitz, Snyder, Richtmyer) Ph.D.
- Hogan, Agnes Cecilia, B.S. 1917, New York City
Zoology, Education (Reed, Ogden) A.M.

- Hoisington, Louis Benjamin, B.A. (Oregon) 1915, Eugene, Ore.
 Psychology, Educational Psychology, Physiology (Titchener, Ogden, Simpson) Ph.D.
 Hou, Chia Yuen, A.T.E.C. (Tangshan Eng.) 1918, Soochow, China
 Bridge Engineering, Railroad Engineering (Jacoby, Barnes) M.C.E.
 Hsu, Shih-ta, B.S. in C.E. (Pei-Yang) 1917, Shi-wu Village, Shaoking, China
 Hydraulic Engineering, Sanitary Engineering (Seery, Ogden) M.C.E.
 Hyatt, James Mead, A.B. 1918, Owego
 Experimental Physics, Theoretical Physics, Alternating Currents (Gibbs, Nichols, Bedell) Ph.D.
 Jackson, Howard Campbell, B.S. 1915; M.S. in Agr. 1918, Trumansburg
 Dairy Industry, Dairy Bacteriology, Organic Chemistry (Guthrie, Stocking, Orndorff) Ph.D.
 Jackson, Stuart Deming, A.B. 1916, Cincinnati, Ohio
 Organic Chemistry, Analytical Chemistry, Physical Chemistry (Orndorff, Dennis, Briggs) Ph.D.
 Joffrion, Doris Kernan, B.A. (Sophie Newcomb College) 1917, Marksville, La.
 English Literature, American Literature (Adams, Prescott) A.M.
 †Kawamata, Takashi, B.S. (Wasoda) 1917, New York City
 [Adviser: Karapetoff.]
 Kelley, Louise, A.B. (Mt. Holyoke) 1916, Franklin, N. H.
 Organic Chemistry, Agricultural Chemistry, Sanitary Chemistry (Orndorff, Cavanaugh, Chamot) Ph.D.
 Kennedy, James Arthur, A.B. 1917, Dannemora
 Sanitary Chemistry, Analytical Chemistry (Chamot, Cavanaugh) A.M.
 Kidwell, Avis Leone, B.A. (Ottawa) 1916, Washington, D. C.
 English Literature, Old English (Cooper, Monroe) A.M.
 Koch, Catharine Elizabeth, B.S. (Mich. Agr. College) 1909; A.M. 1915, Buffalo
 Landscape Art, Rural Engineering (Davis, Riley) M.L.D.
 Koo, Nee-Sun, B.S. in C.E. (Govt. Institute of Technology) 1918, Shanghai, China
 Bridge Engineering, Railroad Engineering (Jacoby, Barnes) M.C.E.
 Lane, Emily A., B.S. (Bucknell) 1910, Brockwayville, Pa.
 Philosophy, English Literature (Creighton, Adams) A.M.
 deLaski, Edgar Gustave, A.B. 1917, Weehawken, N. J.
 Philosophy, Psychology, Ethics (Creighton, Hammond, Weld, Thilly) Ph.D.
 Lee, Alfred Chang, B.S. in C.E. (Illinois) 1917, Shangsha, China
 Bridge Engineering, Railroad Engineering (Jacoby, Barnes) M.C.E.
 †Lee, Dih Hoe, B.A. (St. John's Univ.) 1910; M.S. (Wisconsin) 1918, Shanghai, China
 [Adviser: Kingsbury.]
 Lee, Dih Yuin, B.S. (St. John's Univ.) 1915, Changha, China
 General Physics, Photometry and Illumination (Nichols, Richtmyer) M.S.
 Liang, Yin Nien, B.S. (Peking Technical) 1910, Peking, China
 Electrical Engineering, Power Plant Design (Karapetoff, Matthews) M.M.E.
 Liddell, Howard Scott, A.B. (Michigan) 1917; A.M. (same) 1918, Erie, Pa.
 Psychology, Physiology, Mathematics (Titchener, Simpson, McMahon) Ph.D.
 Lu, Feng-Shu, C.E. 1918, Wusih, China
 Railroad Engineering, Hydraulic Engineering (Barnes, Seery) M.C.E.
 Lukens, Earl Gibson, A.B. (Indiana) 1917, Cowgill, Mo.
 Animal Husbandry, Biochemistry, Agricultural Chemistry (Savage, Sumner, Cross) Ph.D.
 McCann, W. Irvine, B.S. (Ohio State) 1914, Frayzeysburg, Ohio
 Pomology, Plant Pathology, Plant Physiology (Chandler Rees, Hesler, Curtis) Ph.D.
 Died November 1918.
 †McCune, Mary Gertrude, Litt.B. (Grove City) 1917, Grove City, Pa.
 [Adviser: Miss Rose.]
 McReynolds, Grace Eleanor, B.A. (Maryville) 1904, Maryville, Tenn.
 English, Medieval History (Cooper, Burr) A.M.
 McRostie, Gordon Peter, B.S.A. (Toronto) 1912; M.S. in Agr. 1918, Guelph, Ont., Can.
 Plant Breeding, Plant Pathology, Soil Technology (Emerson, Reddick, Bizzell) Ph.D.
 Macomber, Hugh Irwin, B.S. 1915, Ithaca
 Poultry Husbandry, Agricultural Chemistry, Dairy Bacteriology (Benjamin, Cross, Stocking) Ph.D.
 Martin, Thomas Lysons, B.A. (Brigham Young) 1912, American Fork, Utah
 Soil Technology, Plant Physiology, Bacteriology (Lyon, Bizzell, Knudson, Curtis, Moore) Ph.D.
 Maxson, Lawrence Meredith, A.B. (Alfred) 1918, Cooperstown
 American History, English History (Hull, Sweet) Ph.D.
 Mekeel, Amy Grace, A.B. 1910, Trumansburg
 Taxonomic Botany, Zoology (Wiegand, Reed) A.M.
 Montgomery, Lois Elizabeth, Warsaw
 English Literature, English Language (Northup, Monroe) A.M.
 †Morris, Leland Charles, A.B. (Denver) 1918, Denver, Col.
 Muesebeck, Carl Frederick William, B.S. 1916, Ithaca
 Insect Parasitology, Bacteriology, Systematic Entomology (Matheson, Moore, Bradley) Ph.D.
 Mulhern, Alice Wade, B.A. (D'Youville) 1914, St. Mary's, Pa.
 English Literature, Old English (Cooper, Monroe) A.M.
 Murphy, Helen Elizabeth, B.S. 1917, Phoenix
 Limnology, Medical Entomology, Comparative Pathology and Bacteriology (Needham, Johannsen, Moore) Ph.D.
 Nanz, Ralph Simpson, B.S. 1912, Ithaca
 Plant Physiology, Botany (Taxonomy), Physical Chemistry (Knudson, Curtis, Wiegand, Briggs) Ph.D.

- Nichols, Melvin L., B.Chem. 1918,
Organic Chemistry, Physical Chemistry, Mechanical Engineering (Orndorff, Briggs, Smith)
Dayton, Ohio
Ph.D.
- Nishikawa, Soji, Ph.D. (University of Tokyo)
Honorary Fellow.
Tokyo, Japan
- Noble, Clarence Vernon, B.S. 1916,
Farm Management, Economics, Animal Husbandry (Livermore, Warren, Davenport, Savage)
Ithaca
Ph.D.
- O'Rourke, Lawrence James, B.A. (Lawrence) 1915,
Public Speaking, American Literature (Winans, Prescott)
Appleton, Wisc.
A.M.
- †Parks, Charles John, Ph.B. (Alfred) 1907,
[Adviser: G. A. Works.]
Ithaca
- Pei, I-Hsiang, A.T.E.C. (Tangshan Eng.) 1917,
Railroad and Highway Engineering, Sanitary Engineering (Barnes, Ogden, Walker)
Anhui, China
M.C.E.
- Perry, Raymond A., B.S. 1918,
Dairy Industry, Chemistry (Stocking, Cross)
Dundee
M.S. in Agr.
- Phillips, Harry Ashton, A.B. (Missouri State) 1908; B.S. in Ed. (same)
Warrensburg, Mo.
A.M.
- Potter, Mary Isabelle, B.S. 1917,
Landscape Design, French (Davis, Mason)
Farmington, Conn.
M.L.D.
- Potts, Abbie Findlay, A.B. 1906; A.M. (Radcliffe) 1914,
English Literature, Old English, Greek (Cooper, Monroe, Andrews)
Troy
Ph.D.
- †Pulsifer, Julia, A.B. (Vassar) 1901,
[Adviser: Miss Rose.]
Auburn
- Puroy, Helen Alice, A.B. (Barnard) 1918,
Plant Pathology, Plant Physiology, Physical Chemistry (Whetzel, Curtis, Briggs)
Croton-on-Hudson
Ph.D.
- Puttick, Gail Ferguson, B.Sc. 1918,
Plant Breeding, Plant Pathology, Soil Technology (Love, Whetzel, Bizzell)
Wellington, S. Africa
Ph.D.
- Rane, Fannie Coolbaugh, B.A. (Wellesley) 1918,
Botany, Plant Pathology (Sharp, Whetzel)
Waban, Mass.
A.M.
- Reyes, Hermenegildo Balbino, M.E. 1918,
Electrical Machinery, Mathematics (Gray, Hurwitz)
Malolos, Bulacan, P. I.
M.M.E.
- Rider, Arthur John, B.S. (Colgate) 1912; M.S. (Colgate) 1914,
Physical Chemistry, Agricultural Chemistry, Sanitary Chemistry (Briggs, Cavanaugh, Chamot)
Apalachin
Ph.D.
- Rothwell, Alice Ermina, B.S. (Elmira) 1914,
Experimental Physics, Photometry (Gibbs, Richtmyer)
Elmira
A.M.
- Schack, William, A.B. 1919,
Physical Chemistry, Organic Chemistry, (Briggs, Orndorff)
Brooklyn
M.S.
- Schindler, Theresa Elizabeth, B.A. (Mt. Holyoke) 1906; M.S. 1918,
Floriculture, Landscape Art, Genetics (Lumsden, White, Curtis, Hutchison)
Gloversville
Ph.D.
- Schmoker, Edward Adolf, D.V.M. (Kansas State Agr.) 1917,
Obstetrics, Bacteriology (Williams, Hopkins, Kingsbury, Moore)
Manhattan, Kan.
M.S.
- Schradieck, Henry Edward, B.S. 1916; M.S. (Illinois) 1918,
Agriculture, Limnology, Animal Morphology (Embrey, Needham, Reed)
Brooklyn
Ph.D.
- Scott, Walter, B.S. (Valparaiso) 1899; B.A. (same) 1902; A.M. (Yale) 1909,
Inorganic Chemistry, Organic Chemistry, Analytical Chemistry (Dennis, Orndorff, Browne)
Akron, Ohio
- Seamon, Helen, B.A. (Wellesley) 1916,
Botany, Zoology (Sharp, Reed)
Freeport
A.M.
- Shen, Liang Hua, M.E. 1918,
Electrical Machinery, Power Plant Design (Karapetoff, Matthews)
Kiang Su, China
M.M.E.
- Sheppard, Hubert, A.B. (Oklahoma State) 1917; A.M. (same)
Lawrence, Kan.
Ph.D.
- Slingerland, Kathryn Lillis, B.A. (Smith College) 1918,
Zoology, Entomology (Reed, Needham)
Manchester, N. H.
A.M.
- Smiley, Edwina Maria, B.A. (Wellesley) 1916,
Plant Pathology, Histology (Whetzel, Eames)
Mansfield, Mass.
A.M.
- Smith, Christianna, A.B. (Mt. Holyoke) 1915,
Histology and Embryology, Pathology and Bacteriology (Kingsbury, Moore)
New Bedford, Mass.
A.M.
- Smith, George Hume, A.B. (Wabash) 1918,
Plant Pathology, Plant Physiology, Physical Chemistry (Whetzel, Curtis, Briggs)
Indianapolis, Ind.
Ph.D.
- Steele, Mary Susan, A.B. 1916,
English Literature, French Literature (Adams, Mason)
Wagram, N. C.
A.M.
- Stevenson, Charles Robert, B. S., (Miami Univ.) 1918,
Plant Pathology, Plant Physiology, Chemistry (Whetzel, Curtis, Dennis)
Stout, Ohio
Ph.D.
- Stowe, Evelyn May, A.B. (Vassar) 1914,
Stratton, Mildred Elizabeth, B.A. (Wellesley) 1917,
Botany, Plant Pathology (Sharp, Hesler)
Hudson, Mass.
Bradford, Pa.
A.M.
- Sullivan, Alice Helen, B.A. (Colorado) 1916; M.A. (same) 1916,
Psychology, Education, Physiology (Titchener, Ogden, Simpson)
Grand Junction, Col.
Ph.D.
- Sun, Kuo Feng, B.S. (Government University of Pekin) 1916,
Applied Electricity, Engineering Mathematics (Bedell, Karapetoff)
Fengtien, China
M.S.
- Supplee, George Cornell, B.S. 1913; M.S. in Agr. 1914,
Bacteriology, Sanitary Chemistry, Biochemistry (Stocking, Chamot, Sumner)
Ithaca
Ph.D.
- †Tear, Frank William, A.B. (Oberlin) 1911,
[Adviser: Weld.]
Painesville, Ohio
- Thomas, Roy Hilman, A.B. (Kentucky State) 1913,
Rural Education, Rural Economy (Works, Lauman)
Durham, N. C.
M.S.
- ††Tonow, Paul Takuma, Nogakushi (Tohoku Imperial) 1916,
[Adviser: Davis.]
New York City

- Traver, Miss Jay R., A.B. 1918, Willoughby, Ohio
Insect Ecology, Aquiculture (Needham, Embury) A.M.
- †Traxel, Emma Jane, B.S. 1899; A.M. 1917, Rome
- Van Dyck, Miram Hasbrouck, A.B. (Vassar) 1912; A.M. (Cornell) 1918, New York City
German Literature, German Philology, American Literature (Faust, Boesche, Prescott) Ph.D.
- Van Winkle, Katherine, B.S. (Washington) 1918, Oakville, Wash.
Paleontology, Stratigraphy, Systematic Zoology (Harris, Von Engeln, Wright)
- Vogel, Irvin H., M.S. (Iowa State) Ithaca
Plant Pathology, Botany, Organic Chemistry (Whetzel, Wiegand, Orndorff) Ph.D.
- von Schenk, Kurt, (Conn. Agr.) 1910; A.B. (Harvard) 1913; M.S. in Agr. (Cornell) 1917, Ithaca
Rural Economy, Economic History, Economics and Finance (Lauman, Usher, Davenport, Reed) Ph.D.
- Wang, Ching Hsien, C.E. (Lehigh) 1918, Tientsin, China
Bridge Engineering, Railroad Engineering (Jacoby, Barnes, Seery) M.C.E.
- Wang, Chieh-Yao, A.T.E.C. (Tangshan Eng.) 1915, Ningpo, China
Bridge Engineering, Topographic Engineering (Jacoby, Underwood) M.C.E.
- Wang, Tei Chong, C.E. (Valparaiso) 1918, Shantung, China
Sanitary Engineering, Highway Engineering (Ogden, Barnes) M.C.E.
- Weaver, William Jack, B.S. (Massachusetts Agr.) 1912, Highland
Rural Education, Farm Management (Works, Lusk, Warren, Livermore) M.S.
- Webster, Robert Lorenzo, A.B. (Illinois) 1908, Ithaca
Economic Entomology, Plant Physiology, Pomology (Herrick, Curtis, Heinicke) Ph.D.
- Wehrle, Lawrence Paul, B.S. (Kansas State Agr.) 1914, Scranton, Kansas
Economic Entomology, Biology, Systematic Entomology (Crosby, Needham, Johannsen) Ph.D.
- Wellhouse, Walter Housley, A.B. (Univ. of Kansas) 1913; A.M. (same) 1917, Ithaca
Economic Entomology, Entomology, Zoology (Herrick, Needham, Reed) Ph.D.
- White, Dorothy Allison, A.B. 1917, Germantown, Pa.
English Literature, Latin (Northup, Bennett) A.M.
- White, Ward Benjamin, A.B. 1908, Ithaca
Agricultural Chemistry, Sanitary Chemistry, Pathology (Cavanaugh, Chamot, Moore) Ph.D.
- Whiting, William Alonzo, B.S. (Allegheny) 1914, Meadville, Penna.
Dairy Bacteriology, Organic Chemistry, Biochemistry (Stocking, Orndorff, Sumner) Ph.D.
- Wiggins, Roy Glen, B.S. (Missouri) 1914; M.S. (Cornell) 1915, Columbia, Mo.
Farm Crops, Plant Breeding, Plant Physiology (Montgomery, Curtis, Love) Ph.D.
- Work, Eunice, B.A. (Tarkio) 1917, Tarkio, Mo.
Latin, French (Bennett, Mason) A.M.
- Wright, Ivan, B.A. (Iowa Teacher's) 1913; B.S. (Michigan Agr. Coll.) 1917; M.S. (same) 1918, Lawford, W. Va.
Rural Economy, Economics and Finance, Economic History (Lauman, Reed, Davenport, Usher) Ph.D.
- Wright, Mary Evelena, B.S. 1914, Ithaca
Bacteriology, Chemical Microscopy, Agricultural Chemistry (Moore, Chamot, Cavanaugh,) Ph.D.
- Wu, Wei Yoh, B.S. in E.E. (Illinois) 1917, Hunan, China
Electrical Engineering, Physics (Karapetoff, Bedell) M.M.E.
- Wyckoff, Ralph W. G., B.S. (Hobart) 1916, Geneva
Inorganic Chemistry, Physical Chemistry, Analytical Chemistry (Dennis, Briggs, Chamot) Ph.D.
- Yen, Hoong Kwie, B.C.E. (Peking Gov't University) 1916, Anhui, China
Railroad and Highway Engineering, Sanitary Engineering (Barnes, Ogden) M.C.E.
- Young, Benjamin Percy, B.S. (Kansas) 1908; M.S. (same) Lawrence, Kan.
Insect Morphology, Ecology, Zoology (Johannsen, Needham, Reed) Ph.D.
- Young, Harry Pestana, B.S. (Pennsylvania State) 1913, Ithaca
Farm Management, Economics, Animal Husbandry (Warren, Davenport, Savage) Ph.D.
- Zee, Nai Zung, B.S. in C.E. (Pennsylvania) 1918, Shanghai, China
Hydraulic Engineering, Railroad Engineering (Seery, Barnes) M.C.E.

STUDENTS REGISTERED FOR GRADUATE WORK DURING THE SUMMER OF 1918

Anderson, Ernest Gustaf, B.Sc. (Nebraska) 1915, Plant Breeding, Plant Histology, Organic Chemistry (Emerson, Eames, Orndorff)	Concord, Neb. Ph.D.
Anderson, Juliette Norma, B.S. (Oregon State College) 1918, French, Education (Mason, Ogden)	Portland, Oregon Ph.D. Chambersburg, Pa. A.M.
Barrow, Elva Eudora, A.B. (Randolph Macon Woman's College) 1911, Benson, John Phineus, B.S. (Utah Agr.) 1915, Plant Physiology, Soil Technology, Physical Chemistry (Knudson, Curtis, Bizzell, Briggs)	Ferrun, Va. Logan, Utah Ph.D.
Béziat, Kate Bradley, A.B. (Vassar) 1892 French, Spanish (Mason, Keniston)	Spencer A.M.
Bruman, Abraham Joseph, B.Sc. in Agr. (Nebraska) 1918, Plant Pathology, Plant Physiology, Plant Breeding (Whetzel, Barker, Curtis)	Lincoln, Nebraska Ph.D.
Bussell, Frank Pores, A.B. (Colgate) 1901, Plant Breeding, Plant Physiology, Soil Technology (Love, Myers, Knudson, Curtis, Bizzell, Buckman)	Ithaca Ph.D.
Carpenter, Charles Milton, D.V.M. 1917, Veterinary Bacteriology, Obstetrics (Moore, Williams)	Unadilla M.S.
Chambers, Mary Hendricks, B.A. (Oregon) 1917, Zoology, Inorganic Chemistry (Reed, Browne)	Eugene, Ore. A.M.
Clark, Olin Mitchell, B.S. (Clemson Agr. College) 1909, Rural Education and Economy, Farm Management (Works, Lauman, Warren)	Clemson College, S. C. M.S.
Cooper, Herbert Press, M.S. (Univ. of Wisconsin) 1915, Plant Breeding, Soil Technology, Farm Crops (Love, Bizzell, Montgomery)	State College, Pa. Ph.D.
†Coville, Perkins, B.S. 1918, [Adviser: S. N. Spring.]	Ithaca
Cramer, Earnest Faville, B.S. in Agr. (Iowa State College) 1915, Rural Education, Farm Management (Works, Lusk, Livermore)	Red Oak, Iowa M.S. in Agr.
Curtis, Florence A., A.B. 1908, English, History, Modern European History (Lunt, Becker, Burr)	Port Chester A.M.
Davidow, Morris N., B.S. 1918, Plant Physiology, Human Physiology (Curtis, Simpson)	Brooklyn M.S.
Dynes, Oliver Wesley, B.S. (N. Dakota Agr.) 1907; M.S. in Agr. (Cornell) 1912, Farm Crops, Plant Breeding, Soils (Montgomery, Love, Emerson, Bizzell)	Fargo, N. D. Ph.D.
Edwards, Faye Lenore, A.B. 1917, French, English (Mason, Northup)	Ithaca A.M.
Eyster, Lewis A., A.B. (Bucknell) 1917, Plant Breeding, Systematic Botany (Hutchison, Wiegand)	Fisher's Ferry, Pa. A.M.
Eyster, William Henry, A.B. (Bucknell) 1914; A.M. (same), Plant Breeding, Plant Histology, Systematic Botany (Emerson, Eames, Rowlee)	Cortland Ph.D.
Flockhart, Marguerite Craig, A.B. 1918, European History, English Literature (Becker, Northup)	Newark, N. J. A.M.
Flory, Lillie Katherine, B.S. (Bridgewater) 1917, Mathematics, Zoology (Owens, Reed)	Bridgewater, Va. A.M.
Gaynor, Madeline Agathe, B.S. (Elmira) 1917, French, Spanish (Mason, Keniston)	Elmira A.M.
Gentry, Charles Burt, S.B. in Ed. (Chicago) 1912, Genung, Mary Lucille, B.A. (Elmira) 1908, Gershoy, Alexander Morris, B.S. 1918 Botany, Geology (Wiegand, von Engeln)	Springfield, Mo. Bath New York A.M.
Gillett, Roy Lewis, B.S. 1917, Farm Management, Economics, Soils (Livermore, Warren, Davenport, Bizzell)	Colden Ph.D.
Gould, Clifford Morton, A.B. 1918, American History, Economics (Bretz, Reed)	Horseheads A.M.
Graham, Vi Arvin, A.B. 1917, Philosophy, Education (Creighton, Ogden)	Richmond, Va. A.M.
Hendrickson, Arthur Howard, B.S. (Michigan Agr.) 1913, Pomology, Plant Physiology (Chandler, Curtis)	Berkeley, Calif. M.S.
Hines, Winifred Luella, B.A. (Hunter) 1916, English Literature, Old English (Northup, Monroe)	Brooklyn A.M.
Hopkins, Edward Stanley, B.S.A. (Ontario Agr. College) 1911, M.S. (Wisconsin) 1916, Soil Technology, Farm Crops, Agricultural Chemistry (Lyon, Montgomery, Rice)	Vermilion, Alberta, Canada Ph.D.
Hubbell, Rebecca B., A.B. (Mt. Holyoke) 1909, Jensen, Ward C., B.S. (Univ. of California) 1917, Farm Crops, Botany (Montgomery, Knudson, Curtis)	New Haven, Conn. Omaha, Nebr. M.S. in Agr.
Kartluke, Amelia, B.A. (New York State College for Teachers) 1911, English Literature, English Language (Strunk, Monroe)	Green Island A.M.
Koch, Catherine Elizabeth, B.S. (Michigan Agr.) 1909; M.S. (Cornell) 1915, Landscape Art, Rural Engineering (Davis, Riley)	Buffalo M.L.D.
MacMonagle, Ruth Vesta, A.B. (St. Lawrence) 1907, Spanish, French (Sturgis, Mason)	Canton A.M.
McGinnis, Forrest William, B.S. (Oregon State) 1911, Farm Crops, Plant Physiology (Montgomery, Curtis)	Corvallis, Oregon M.S. in Agr.

- McRostie, Gordon Peter, B.S.A. (Toronto) 1912; M.S. in Agr. (Cornell) 1918, Guelph, Ontario
Plant Breeding, Plant Pathology, Soil Technology (Emerson, Barrus, Bizzell) Ph.D.
- Mank, Edith Webster, A.B. (Mt. Holyoke) 1913, Lawrence, Mass.
Entomology, Rural Education (Needham, Works) A.M.
- Mank, Helen Gardner, A.B. (Mt. Holyoke) 1909, Lawrence, Mass.
Human Physiology, Entomology (Simpson, Needham) A.M.
- Martin, Thomas Lysons, B.A. (Brigham Young) 1912, American Fork, Utah
Soil Technology, Plant Physiology, Bacteriology (Lyon, Knudson, Curtis, Moore) Ph.D.
- Miller, Eda Grace, A.B. 1918, Wilkes-Barre, Pa.
- Monnett, Victor Elvert, A.B. (Oklahoma State Univ.) 1912, Norman, Oklahoma
Physical Geography, Economic Geology, Soil Technology (von Engeln, Ries, Bizzell) Ph.D.
- Montgomery, Lois Elizabeth, A.B. (Elmira) 1918, Warsaw
English Literature, English Language (Northup, Monroe) A.M.
- Murphy, Helen Elizabeth, B.S. 1917, Phoenix, N. Y.
Limnology, Parasitology (Needham, Riley) M.S.
- Nanz, Ralph Simpson, B.S. 1912, Ithaca
Plant Physiology, Botany (Taxonomy), Physical Chemistry (Knudson, Curtis, Wiegand, Briggs) Ph.D.
- Napier Frances, B.A. (Adelphi) 1906, Montclair, N. J.
Literary Criticism, Philosophy (Cooper, Creighton) A.M.
- May, Sara Mabel, B.A. (Ohio Wesleyan) 1916, Wheeling, W. Va.
English Literature, English Language (Northup, Monroe) A.M.
- Olney, Roy A., B.S. 1915, Trumansburg
Rural Education, Farm Management (Works, Livermore, Misner) M.S.
- O'Rourke, Lawrence James, B.A. (Lawrence) 1915, Appleton, Wis.
Public Speaking, American Literature (Winans, Prescott) A.M.
- Parkinson, Harry Glen, A.B. (Waynesburg) 1911; B.S. in Agr. (Univ. of Illinois) 1913, State College, Pa.
Rural Education (Works) M.S.
- Phillips, Mrs. Helen Wherry, B.S. (Pennsylvania) 1907, Philadelphia, Pa.
Botany (Taxonomy), Physical Geography (Wiegand, von Engeln) M.S. in Agr.
- Puttick, Gail Ferguson, B.Sc. 1918, Wellington, S. Africa
- Randolph, Lowell Fitz, Ph.B. (Alfred University) 1916, Alfred
Botany, Plant Pathology (Sharp, Whetzel) A.M.
- Reyes, Hermenegildo Balbino, Malolos, Bulacan, P. I.
Electrical Machinery, Mathematics (Gray, Hurwitz) M.M.E.
- Rothwell, Alice Ermina, B.S. (Elmira) 1914, Elmira
Experimental Physics, Photometry (Gibbs, Richtmyer) A.M.
- St. John, Emily Porter, A.B. (Elmira) 1890, Brooklyn
Social and Political Ethics and Philosophy, Education (Creighton, Ogden) A.M.
- Schindler, Theresa Elizabeth, B.A. (Mt. Holyoke) 1906, Gloversville
Floriculture, Landscape Art (White, Curtis) M.S.
- Sewell, Dorothy A., A.B. (Smith) 1916, Walton
Zoology, Chemistry (Reed, Browne) A.M.
- Smith, George Hume, A.B. (Wabash) 1918, Indianapolis, Ind.
Plant Pathology, Plant Physiology, Physical Chemistry (Whetzel, Curtis, Briggs) Ph.D.
- Smith, Raymond Stratton, B.S. (Pomona) 1907; B.S. (Univ. of Illinois) 1913; M.S. (Penn. State) 1916, State College, Pa.
Plant Physiology, Geology, Soils (Knudson, Curtis, von Engeln, Bizzell) Ph.D.
- Stoddard, Edwin Freeman, B.S. (Penn. State) 1913, Hyattsville, Md.
Plant Breeding, Plant Physiology (Myers, Curtis) M.S.
- Strickler, Helen Miles, A.B. (Wilson) 1913, Waynesboro, Pa.
English Literature, English Language (Broughton, Monroe) A.M.
- Tapke, Victor Ferdinand, B.S. (Ohio State) 1914, Ithaca
Plant Pathology, Plant Physiology, Botany (Reddick, Whetzel, Knudson, Curtis, Eames, Wiegand) Ph.D.
- Thomas, Roy Hilman, A.B. (Kentucky State) 1913, Durham, N. C.
Rural Education, (Works) M.S.
- Tiffany, Ruth Winnureeta, A.B. (Juniata) 1917, Huntingdon, Pa.
French, Spanish (Mason, Sturgis) A.M.
- Turpin, Harold Worthington, B.S. (Iowa State) 1916, Ithaca
Soil Technology, Plant Physiology, Physical Chemistry (Bizzell, Curtis, Briggs) Ph.D.
- Wallenstein, Edna, B.A. (Hunter) 1918, New York City
Education, English (Ogden, Strunk) A.M.
- Walton, George Willever, Ph.B. (Lafayette) 1915, Myerstown, Pa.
Zoology, Botany (Reed, Wiegand) M.S.
- Weeks, Dorothy Wolcott, B.A. (Wellesley) 1916, Washington
Experimental Physics, Theoretical Physics (Richtmyer, Gibbs) A.M.
- Wehrle, Laurence Paul, B.S. (Kansas State Agr.) 1914, Scranton, Kansas
Economic Entomology, Biology, Systematic Entomology (Crosby, Needham, Johannsen) Ph.D.
- Wellhouse, Walter Housley, A.B. (Univ. of Kansas) 1913; A.M. (same) 1917, Ithaca
Economic Entomology, Pomology, Zoology (Herrick, Overholser, Reed) Ph.D.
- Wolfe, Edith, A.B. 1903, Pasadena, Cal.
English, Philosophy (Strunk, Creighton) A.M.
- Young, Benjamin Percy, B.S., M.S. (Kansas University) 1908, Lawrence, Kansas
Insect Morphology, Ecology, Zoology (Johannsen, Needham, Reed) Ph.D.
- †Yuasa, Hachiro, B.S. (Kansas State) 1915; M.S. (U. of Illinois) 1917, Tokyo, Japan
[Adviser: J. G. Needham.]

COLLEGE OF ARTS AND SCIENCES

For detailed information concerning the work of the College of Arts and Sciences, candidates for admission to that college should consult the Announcement of the College of Arts and Sciences which will be sent gratis on application to the Secretary of the University.

FACULTY

- SIMON HENRY GAGE, B.S., Emeritus Professor of Histology and Embryology.
THOMAS FREDERICK CRANE, A.B., A.M., Ph.D., Litt.D., Emeritus Professor of the Romance Languages and Literatures.
BURT GREEN WILDER, B.S., M.D., Emeritus Professor of Neurology and Vertebrate Zoology.
WATERMAN THOMAS HEWETT, A.B., Ph.D., Emeritus Professor of the German Language and Literature.
JOHN HENRY COMSTOCK, B.S., Emeritus Professor of Entomology and General Invertebrate Zoology.
CHARLES DE GARMO, Ph.D., Emeritus Professor of the Science and Art of Education.
GEORGE SYLVANUS MOLER, A.B., B.M.E., Emeritus Professor of Physics.
JACOB GOULD SCHURMAN, A.M., D.Sc., LL.D., President of the University, and Lecturer on International Law and Diplomacy.
FRANK THILLY, A.B., Ph.D., LL.D., Dean of the College, and Professor of Philosophy.
EDWARD LEAMINGTON NICHOLS, B.S., Ph.D., LL.D., Professor of Physics.
GEORGE LINCOLN BURR, A.B., LL.D., Litt.D., Professor of Medieval History.
CHARLES EDWIN BENNETT, A.B., Litt. D., Goldwin Smith Professor of Latin.
JAMES EDWIN CREIGHTON, A.B., Ph.D., LL.D., Sage Professor of Logic and Metaphysics, and Dean of the Graduate School.
EDWARD BRADFORD TITCHENER, A.B., A.M., Ph.D., LL.D., Litt.D., Lecturer in Psychology.
NATHANIEL SCHMIDT, A.M., Professor of Semitic Languages and Literatures.
GEORGE PRENTICE BRISTOL, A.B., A.M., Professor of Greek, Director of the Summer Session.
WALTER FRANCIS WILLCOX, A.B., LL.B., A.M., Ph.D., LL.D. Professor of Economics and Statistics.
LOUIS MONROE DENNIS, Ph.B., B.S., Professor of Inorganic Chemistry.
JOSEPH ELLIS TREVOR, Ph.D., Professor of Thermodynamics.
CHARLES HENRY HULL, Ph.B., Ph.D., Goldwin Smith Professor of American History.
WILLIAM RIDGELY ORNDORFF, A.B., Ph.D., Professor of Organic and Physiological Chemistry.
WILDER DWIGHT BANCROFT, A.B., Ph.D., Professor of Physical Chemistry.
ERNEST GEORGE MERRITT, M.E., Professor of Physics.
CHARLES VAN PATTEN YOUNG, A.B., Professor of Physical Culture.
ABRAM TUCKER KERR, B.S., M.D., Professor of Anatomy and Secretary of the Ithaca Division of the Medical College.
JAMES MCMAHON, A.M., Professor of Mathematics.
JOHN HENRY TANNER, Ph.D., Professor of Mathematics.
FREDERICK BEDELL, A.B., Ph.D., Professor of Applied Electricity.
WILLARD WINFIELD ROWLEE, B.L., D.Sc., Professor of Botany.
HEINRICH RIES, Ph.B., A.M., Ph.D., Professor of Geology.

- WILLIAM ALEXANDER HAMMOND, B.A., A.M., Ph.D., Sage Professor of Ancient Philosophy and of Aesthetics.
- HOLLIS ELLSWORTH DANN, Mus.D., Professor of Music.
- ERNEST ALBEE, A.B., Ph.D., Professor of Philosophy.
- BENJAMIN FREEMAN KINGSBURY, A.B., M.S., Ph.D., M.D., Professor of Histology and Embryology.
- SUTHERLAND SIMPSON, D.Sc., M.D., F.R.S.E., Professor of Physiology.
- MARTIN WRIGHT SAMPSON, B.A., M.A., Goldwin Smith Professor of English Literature.
- WILLIAM STRUNK, JR., A.B., Ph.D., Professor of English.
- HERBERT CHARLES ELMER, A.B., Ph.D., Professor of Latin.
- CHARLES LOVE DURHAM, M.A., Ph.D., Professor of Latin.
- GILBERT DENNISON HARRIS, Ph.B., Professor of Paleontology and Stratigraphic Geology.
- GEORGE WALTER CAVANAUGH, B.S., Professor of Chemistry in its Relations to Agriculture.
- JOHN SANDFORD SHEARER, Ph.D., Professor of Physics.
- JOHN IRWIN HUTCHINSON, A.B., Ph.D., Professor of Mathematics.
- VIRGIL SNYDER, B.S., A.M., Ph.D., Professor of Mathematics.
- ALBERT BERNHARDT FAUST, A.B., Ph.D., Professor of German.
- EMILE MONNIN CHAMOT, B.S., Ph.D., Professor of Sanitary Chemistry and Toxicology.
- ARTHUR WESLEY BROWN, B.S., M.S., Ph.D., Professor of Inorganic and Analytical Chemistry.
- ADAM CAPEN GILL, A.B., Ph.D., Professor of Mineralogy and Petrography.
- JULIAN PLEASANT BRETZ, A.B., Ph.D., Professor of American History.
- JAMES GEORGE NEEDHAM, B.S., M.S., Ph.D., Professor of Entomology and Limnology.
- GLENN WASHINGTON HERRICK, B.S.A., Professor of Economic Entomology.
- GEORGE NIEMAN LAUMAN, B.S.A., Professor of Rural Economy.
- SAMUEL PETER ORTH, A.B., Ph.D., Professor of Political Science.
- ALLYN ABBOTT YOUNG, Ph.B., Ph.D., Professor of Economics and Finance.
- JAMES ALBERT WINANS, A.B., A.M., LL.B., Professor of Public Speaking.
- OSKAR AUGUSTUS JOHANNSEN, B.S., A.M., Ph.D., Professor of General Biology.
- JAMES FREDERICK MASON, A.B., Ph.D., Professor of the Romance Languages.
- LANE COOPER, A.B., A.M., Ph.D., Professor of the English Language and Literature.
- ALBERT WILLIAM BOESCHE, A.B., Ph.D., Professor of German.
- PAUL RUSSELL POPE, A.B., Ph.D., Professor of German.
- ROBERT MORRIS OGDEN, B.S., Ph.D., Professor of Education.
- GEORGE LIVINGSTONE HAMILTON, A.B., A.M., Ph.D., Professor of the Romance Languages and Literatures.
- ORA MINER LELAND, B.S. (C.E.), Professor of Astronomy and Geodesy.
- HERBERT JOSEPH DAVENPORT, Ph.B., Ph.D., Professor of Economics.
- CARL BECKER, B.Litt., Professor of Modern European History.
- FRANK ARTHUR BARTON, M.E. in E.E., Professor of Military Science and Tactics.
- CLEMENT D. CHILD, A.B., Acting Professor of Physics.
- FLOYD KARKER RICHTMYER, A.B., Ph.D., Professor of Physics.
- ROSWELL CLIFTON GIBBS, A.B., A.M., Ph.D., Professor of Physics.
- DONALD ENGLISH, B.S., M.B.A., Professor of Economics and Accounting.

PAUL GAHR, A.B., A.M., Ph.D., Acting Professor of Physics.

FREDERICK CLARK PRESCOTT, A.B., Assistant Professor of English.

CLARK SUTHERLAND NORTHUP, A.B., Ph.D., Assistant Professor of English.

ERNEST BLAKER, B.S., Ph.D., Assistant Professor of Physics.

OTHON GOEPP GUERLAC, Licencié ès Lettres, Licencié en Droit, M.A., LL.B., Assistant Professor of the Romance Languages and Literatures.

HUGH DANIEL REED, B.S., Ph.D., Assistant Professor of Neurology and Vertebrate Zoology.

JOSEPH QUINCY ADAMS, JR., A.B., A.M., Ph.D., Assistant Professor of English.

FRANCIS ROBERT SHARPE, B.A., Ph.D., Assistant Professor of Mathematics.

WALTER BUCKINGHAM CARVER, Ph.B., Ph.D., Assistant Professor of Mathematics.

ARTHUR RANUM, A.B., Ph.D., Assistant Professor of Mathematics.

HORACE LEONARD JONES, A.B., A.M., Ph.D., LL.D., Assistant Professor of Greek.

EUGENE PLUMB ANDREWS, A.B., Assistant Professor of Archæology.

DAVID CLINTON GILLESPIE, A.B., M.A., Ph.D., Assistant Professor of Mathematics.

JAMES CHESTER BRADLEY, A.B., M.S., Ph.D., Assistant Professor of Systematic Entomology.

OSCAR DIEDRICH VON ENGELN, A.B., Ph.D., Assistant Professor of Physical Geography.

BENTON SULLIVAN MONROE, A.B., A.M., Ph.D., Assistant Professor of English.

RASMUS S. SABY, Ph.D., Assistant Professor of Political Science.

HARRY PORTER WELD, Ph.B., Ph.D., Assistant Professor of Psychology.

GUY BROOKS MUCHMORE, A.B., Assistant Professor of Public Speaking.

LAURENCE PUMPELLY, A.B., Ph.D., Assistant Professor of the Romance Languages and Literatures.

RALPH HAYWARD KENISTON, A.B., A.M., Ph.D., Assistant Professor of the Romance Languages and Literatures.

ABBOTT PAYSON USHER, A.B., A.M., Ph.D., Assistant Professor of Economics.

ROSS PETER ANDERSON, A.B., Ph.D., Assistant Professor of Chemistry.

WALLIE ABRAHAM HURWITZ, Ph.D., Assistant Professor of Mathematics.

JAMES BATCHELLER SUMNER, Ph.D., Assistant Professor of Biochemistry in the Department of Physiology.

THOMAS ROLAND BRIGGS, Ph.D., Assistant Professor of Physical Chemistry and Electro-Chemistry.

ALBERT HAZEN WRIGHT, A.B., A.M., Ph.D., Assistant Professor of Zoology.

ARTHUR AUGUSTUS ALLEN, A.B., A.M., Ph.D., Assistant Professor of Ornithology.

WILLIAM SILLIMAN FOSTER, A.B., Ph.D., Assistant Professor of Education.

LESLIE NATHAN BROUGHTON, A.B., A.M., Ph.D., Assistant Professor of English.

HAROLD LYLE REED, A.B., Ph.D., Assistant Professor of Economics.

ALEXANDER M. DRUMMOND, A.B., A.M., Assistant Professor of Public Speaking.

RANSOM EVERTS SOMERS, A.B., A.M., Ph.D., Assistant Professor of Geology.

JAMES T. QUARLES, Assistant Professor of Music.

CLYDE FIRMAN CRAIG, A.B., Ph.D., Assistant Professor of Mathematics.

FREDERICK WILLIAM OWENS, Ph.D., Assistant Professor of Mathematics.

CHARLES CLARENCE BIDWELL, A.B., Ph.D., Assistant Professor of Physics.

EARLE HESSE KENNARD, B.A., Ph.D., Assistant Professor of Physics.

ALFRED HENRY SWEET, A.B., A.M., Ph.D., Acting Assistant Professor of English History.

- ALBERT LEROY ANDREWS, A.B., A.M., Ph.D., Assistant Professor of German.
CONY STURGIS, A.B., Assistant Professor of the Romance Languages.
FREDERICK MILLER SMITH, A.B., Assistant Professor of English.
ALBERT RAY SHADLE, B.A., M.A., Assistant Professor of Zoology.
HARLEY EARL HOWE, B.S., M.A., Assistant Professor of Physics.
EVERETT LEE HUNT, A.B., Assistant Professor of Public Speaking.
FRANCES GERTRUDE WICK, A.B., A.M., Ph.D., Acting Assistant Professor of Physics.
JOSEPH VANCE MCKELVEY, B.A., A.B., A.M., Ph.D., Instructor in Mathematics.
ALLAN H. GILBERT, A.B., Ph.D., Instructor in English.
RALPH CHAPMAN RODGERS, M.E., A.M., Instructor in Physics.
ELLSWORTH DAVID ELSTON, A.B., Instructor in Physical Geography.
HUGH MCMILLAN KINGERY, B.A., M.A., Instructor in Histology and Embryology.
CARLETON CHASE MURDOCK, B.S., A.M., Instructor in Physics.
MURRAY WRIGHT BUNDY, A.B., A.M., Instructor in English.
FREDERICK RAYMOND GEORGIA, B.Chem., Instructor in Chemistry.
JESSE FRANKLIN BRADLEY, A.B., Instructor in English.
ERNEST TROWBRIDGE PAINE, A.M., Instructor in Philosophy.
ARTHUR JOHN RIDER, B.S., M.S., Instructor in Chemistry.
RUTH VOORHEES ATKINSON, Instructor in Physical Education.
AARON BODANSKY, B.S., Instructor in Biochemistry.
ELLEN BRAINARD CANFIELD, Instructor in Physical Education.
DEAN LAFEVER GAMBLE, B.S., Instructor in Zoology.
LESTER SPRUCE KENNEL, A.B., M.A., Instructor in the Romance Languages.
JOHN EDWARD FOGLESONG, B.A., M.A., Instructor in Chemistry.
LOUIS BENJAMIN HOISINGTON, A.B., Instructor in Education.
STUART DEMING JACKSON, A.B., Instructor in Chemistry.
MILDRED SEVERANCE, A.B., Instructor in Physics.
RALPH W. G. WYCKOFF, B.S., Instructor in Chemistry.
CLYDE OLIN FISHER, A.B., A.M., Instructor in Economics.
FERNAND DÉSIRÉ ANSELME FERDINAND JAGU, Licencié en Droit, Instructor in the Romance Languages.
JACOB ROLAND COLLINS, B.S., M.S., Instructor in Physics.
HAZEL FURCHGOTT, Ph.B., Instructor in Physical Education.
ERIC VAIL HOWELL, C.E., M.C.E., Instructor in Civil Engineering.
JAMES MEAD HYATT, Instructor in Physics.
LEO PAUL LARKIN, Instructor in Physics.
PIERRE MERTZ, Instructor in Physics.
CLIFFORD ALFRED STANTON, Instructor in Physics.
PERCY AUSTIN FRALEIGH, Instructor in Mathematics.
MELVIN NICHOLS, Instructor in Chemistry.
JOHANNES ABRAHAM CHRISTOFFEL FAGGINGER AUER, B.D., Instructor in the Romance Languages.
CARL WILLIAM BOCK, A.B., A.M., Ph.D., Instructor in Psychology.
LEON FRANCIS CURTISS, A.B., Instructor in Physics.
HORACE LEONARD HOWES, B.S., Instructor in Physics.
HELEN KINNEAR, Instructor in Physical Education.
HELEN BREWSTER OWENS, A.B., A.M., Ph.D., Instructor in Mathematics.

HUBERT SHEPPARD, A.B., A.M., Instructor in Psychology.
 DAVID TRUXTON WILBER, A.B., Instructor in Physics.
 ELIAS ROOT BEADLE WILLIS, A.B., A.M., Instructor in Greek.
 DOROTHY RUSSELL NAYLOR, A.B., Instructor in Mathematics.
 LOUIS WADE CURRIER, S.B., Instructor in Economic Geology.
 FRED WALDORF STEWART, A.B., Instructor in Anatomy.
 HALLDOR HERMANSSON, Lecturer in Scandinavian.
 ROBERT ARGYLL CAMPBELL, A.B., Lecturer in Economics.
 EDITH H. MATZKE, M.D., Lecturer on Hygiene.
 SAMUEL ARCHER MUNFORD, A.B., M.D., Lecturer on Physical Diagnosis.

ASSISTANTS

ANDREW CURTIS WHITE, A.B., Ph.D., Reader in Greek.
 PEARL GERTRUDE SHELDON, A.B., Ph.D., Assistant in Geology.
 HARVEY ELMER STORK, A.B., Assistant in Botany.
 JOSEPH ALMA DYE, A.B., Assistant in Physiology.
 STANLEY ROSS BURLAGE, Assistant in Physiology.
 WILLIAM PERRINE VAN WAGENEN, Assistant in Anatomy.
 ANNA LAURA WHITE, Assistant in Physics.
 LEE HINCHMAN CLARK, Assistant in Chemistry.
 MYRON WESLEY COLONY, Assistant in Chemistry.
 RALPH THOMAS KLINE CORNWELL, Assistant in Chemistry.
 MARY JONES FISHER, A.B., A.M., Assistant in Zoology.
 FORD HAPGOOD MCBERTY, Assistant in Physics.
 FRANK ALEXANDER GRIFFIN, Assistant in Chemistry.
 JAMES ARTHUR KENNEDY, A.B., Assistant in Chemistry.
 AMY GRACE MEKEEL, A.B., Assistant in Zoology.
 ALICE ROTHWELL, Assistant in Physics.
 WILLIAM MARION PIERCE, Assistant in Physics.
 FREDERICK NILL, Assistant in Chemistry.
 WILLIAM EDWIN RICHMOND, Assistant in Physics.
 ANDREWS CLEMENT WINTRINGHAM, Assistant in Chemistry.
 JOHN CULVERT LEPPART, Assistant in Chemistry.
 WILLIAM LITTLEWOOD, Assistant in Physics.
 GERTRUDE AMELIA JOHNSON MACDONALD, Assistant in Zoology.
 EUGENE JOSEPH HASSELBECK, Assistant in Chemistry.
 ARTHUR WALKER BULL, Assistant in Chemistry.
 LEONARD ACKER, Assistant in Economics.
 MARY E. BARSTOW, Assistant in Economics.
 HAROLD ARTHUR BEDIANT, A.B., Assistant in Chemistry.
 ALBERT JOHN ECKHARDT, Assistant in Economics.
 AGNES CECILIA HOGAN, B.S., Assistant in Zoology.
 FREDERICK MARTIN HOSKINS, Assistant in Political Science.
 WILLIAM MARION PIERCE, Assistant in Physics.
 J. P. SHAW, Assistant in Economics.
 MARY EVALENA WRIGHT, B.S., Assistant in Chemistry.
 HELEN L. SLIMM, Assistant in Chemistry.

JOHN D. BLANCHARD, Assistant in Psychology.
FRANK WILLIAM DOUGLAS, A.B., A.M., Assistant in Chemistry.
JENETTE EVANS, Assistant in Physiology.
JOSEPH HOWARD FLINT, Assistant in Chemistry.
K. G. HANSSON, Assistant in Physical Education.
CHRISTIANA SMITH, B.A., Assistant in Histology.
ELLEN MARGARET VAN NUYS, Assistant in Physics.
HENRY S. BERKHOFF, Assistant in Zoology.
RAYMOND JOHN HEMPHILL, Assistant in Chemistry.
JAMES WILSON MCCARTHY, Assistant in Geology.
ELEANOR C. McMULLEN, Assistant in Zoology.
FREDERICK MAY, Assistant in Physics.
LOUIS MITTLEMAN, Assistant in Chemistry.
WILLIAM SCHACK, A.B., Assistant in Chemistry.
FREDERICK CHARLES SCHMUTZ, Assistant in Chemistry.
MERIT SCOTT, Assistant in Physics.
DANIEL SNYDER GUSTIN, Assistant in Chemistry.
LAWRENCE MEREDITH MAXSON, A.B., Assistant in English History.

COLLEGE OF ARTS AND SCIENCES

For admission to the College of Arts and Sciences, see page 37; for tuition in the College of Arts and Sciences, see page 44.

Two curricula are offered in the College of Arts and Sciences, one leading to the degree of Bachelor of Arts, the other leading to the degree of Bachelor of Chemistry.

THE DEGREE OF BACHELOR OF ARTS

1. Requirements for Graduation.

- a. Residence for eight terms as defined and provided for in paragraphs 2-6.
- b. Credit for one hundred and twenty hours, of which at least ninety hours must be for courses given in the College of Arts and Sciences.
- c. A grade of at least C in at least sixty of the required one hundred and twenty hours. A, B, C, D are passing grades; E represents a condition; F a failure.
- d. Election of courses in accordance with the provisions of paragraphs 8-17 (Choice of Studies).
- e. Completion of the work in Military Drill or in Physical Training prescribed by the University Faculty.

2. Credit for Terms of Residence.

- a. **During the Academic Year.** To secure credit for a term of residence, a student must complete during that term at least twelve hours of the work for which he has registered.
 - i If, as a result of ill health or of other causes beyond his control, a student fails to pass twelve hours in a term, the term's residence may be completed either by attendance at a summer session or by examination or by both as the Faculty may determine, but no credit for courses elected in any other term may be used to complete the necessary twelve hours.
 - ii When failure to pass twelve hours is due to other causes than those just specified, all credit for the term in residence and in hours is cancelled and the student may resume his work in the College only under such conditions and at such time as the Faculty may designate. A freshman, however, who, at the end of his first term, has failed to pass twelve hours of work, but who nevertheless is permitted to continue in the College, may be allowed until the beginning of his fourth term to make up deficiencies in courses for which he was registered during the first term whenever such deficiencies may, under the rules of the College, be made up.
 - iii A student's general record may be so unsatisfactory that the Faculty will refuse him permission to continue in the College even though residence credit for the preceding term may have been established.
- b. **By Examination at Admission.** In case a student has gained twelve hours of college credit by passing at admission examinations set for that purpose, he will be considered as having completed one term of residence. If the college credit gained at entrance amounts to six hours, he may complete a term of residence by securing credit for at least six hours in a summer session of the University.
- c. **Summer Sessions.** A student who has satisfied the entrance requirements of the College and has afterward completed in two or more summer sessions of the University at least twelve hours of work in courses selected with the approval of the Dean, will be regarded as having thus fulfilled a term of residence. Credit for a maximum of eight hours and (except with the permission of the Committee on

Academic Records) a minimum of five hours may be secured in any one summer session. Under no circumstances will work done in summer sessions be accepted as the equivalent of more than two terms. Courses pursued in summer sessions of other universities belonging to the Association of American Universities by a student regularly registered in this College may be credited toward the degree, but permission to take such courses must be secured in advance from the Dean of this College.

3. **Residence During the Last Two Terms.** The degree will not be conferred upon any student unless he has been in residence at Cornell University during the last two of the required eight terms.

4. **Admission to Advanced Standing.** A student admitted to the College of Arts and Sciences from another college of Cornell University or from any other institution of collegiate rank will receive credit toward the degree of Bachelor of Arts for the number of terms and of hours to which his records may, in the judgment of the Faculty, entitle him. In order, however, to obtain the degree of Bachelor of Arts he must, as a candidate for that degree, have been in residence at least two terms in the College of Arts and Sciences and in that college only.

5. **Registration in Two Colleges of the University.** A student who has completed in the College of Arts and Sciences at least six terms of residence (no one of them under the provisions of paragraph 2b) may, with the permission of the Faculties concerned, be registered both in the College of Arts and Sciences and also in any other college of Cornell University.

6. **Registration in the College and in the Graduate School.** A student who has satisfied all the requirements for graduation except in respect of residence, may, with the permission of the Graduate School, register both in the College of Arts and Sciences and in the Graduate School.

7. **Removal of Marks of Conditioned, Incomplete, and Absent.** A student who in any course has received a term mark of E (a condition) or a mark of incomplete or of absent may, with the consent of the Dean and upon payment of the fee required by the University be permitted to remove the mark by examination or otherwise as the Department concerned may direct. A mark of conditioned or of incomplete or of absent may not be removed later than registration day of the third term of attendance in the University after the course was taken in class and not more than one attempt at removal will be allowed.

A student who has received a mark of F (a failure) in any course must register again for the course if he desires to secure credit therefor.

Choice of Studies

8. **At least Twelve Hours of Work.** A student must register each term for at least twelve hours of work. For registration in a course not in the College of Arts and Sciences the permission of the college or of the professor concerned must be secured.

9. **Under-class Advisers.** Each freshman and each sophomore must confer with an under-class adviser before handing in his study card to the Dean. The function of the adviser is to assist the student in his choice of studies, to advise him during the term regarding his work, and generally to give him friendly counsel.

10. **Under-class Requirements.** During the freshman and the sophomore year, each student is required to include in the courses for which he registers the following: in English and history, six hours; in one or more languages other than English, six hours; in philosophy, psychology, and mathematics, six hours; and in physics, chemistry, geology, physical geography, and the biological sciences, six hours. Of these hours the student is required to take at least twelve, and advised to take more, in his freshman year. Each six hours may be entirely in one division (for example, English six hours), or partly in one and partly in another (for example, English three hours and history three hours). College credit gained under paragraph 2b may not be applied in satisfaction of any of these group requirements.

11. Courses Open to Freshmen.

a. The following courses in the College of Arts and Sciences are open to freshmen without special permission, except that

1. a student may not register for any of these courses for which he has not satisfied the prerequisites if any are specified (see announcement under each course).
2. a student may not register for any of these courses for which he has presented an acceptable equivalent at entrance.

Bibliography 1, 2

History 1, 2, 31, 32

Biology 1

Italian 1, 2

Botany 1, 2, 3, 4a, 4b

Latin A, B, 1, 3

Chemistry 1, 6, 7, 85

Mathematics 1, 2, 2E, 3, 5, 6, 7, 8, 15

English 1, 3

Music 1 (by examination, see page 79)

Entomology 4, 5, 10

Natural History 60

French 1, 3, 4, 4a, 5, 6

Physics 2, 3, 4a, 4b, 7, 8, 10

Geology 1, 2, 11, 21

Physiology 3, 6

German 1, 3, 4, 5, 5a, 7, 8

Spanish 1, 2, 3

Greek 1, 2

Zoology 1, 5, 6, 12

b. Subject to the permission mentioned in paragraph 8, required courses in other colleges in the regular freshman schedule of those colleges may be elected by freshmen in the College of Arts and Sciences.

c. Under exceptional circumstances, a freshman may by petition secure permission to take courses (including freshman electives in other colleges) in addition to those allowed under a and b.

12. Upper-class Groups and Advisers. Each student shall choose at the beginning of his junior year one of the following groups:

1. Ancient Languages.

7. Physics.

2. Modern Languages.

8. Chemistry.

3. English and Public Speaking.

9. Botany.

4. Philosophy, Psychology, and Education (including Physical Education).

10. Zoology and Entomology.

11. Physiology, Histology, and Embryology.

5. History and Political Science.

12. Geology and Physical Geography.

6. Mathematics and Astronomy.

In the group selected he must complete during his junior and his senior year at least twenty hours of work. In choosing these twenty hours the student must obtain the advice and approval of some professor or assistant professor within the group. With the sanction of his adviser and of the Dean, a student may choose, instead of one of the upper-class groups listed above, a combination of two related groups. A senior in this College who is registered also in some other college of Cornell University is excused from ten of these twenty hours.

13. Theses. Any senior candidate for the degree of Bachelor of Arts may, with the permission of the Dean, arrange with the Department in which he is taking his principal work to write a thesis which, if accepted, shall entitle him to not more than three hours of credit a term.

14. Study Cards. On or before the third day of instruction a student registering in the College for the first time must file at the Dean's office his study card with list of courses for the term.

15. Two weeks before the end of each term every student must file at the Dean's office his study card with list of courses for the next term.

16. Changes in List of Courses. With the consent of the Dean and the approval of the adviser, a student may alter his list of courses in the first term during the first six days of instruction, and in the second term during the first day of instruction.

17. Thereafter no student will be permitted to cancel his registration for any course in which he is registered, unless he shall previously have obtained from the Dean authorization to do so on the ground of ill health or for other reasons beyond the student's control.

BACHELOR OF ARTS WITH HONORS

1. Any department, or group of departments, in the College of Arts and Sciences may recommend that the degree of Bachelor of Arts with Honors in a particular subject or group of subjects shall be awarded to a student who, in addition to complying with the ordinary requirements for the degree, has satisfied such additional requirements as the department or group of departments concerned may set.

2. Any department or group of departments may admit to candidacy for Honors a student who has completed four terms of residence, at least half of whose work is above C, and who has received no more than one term mark below C during his second year of residence. Further prerequisites may be set by the departments or groups of departments concerned. A student who has maintained an exceptionally high standard of work during his third year of residence may be added to the list of candidates for Honors not later than the beginning of his seventh term of residence. A student may be dropped from the list of candidates for Honors for failure to maintain a satisfactory standard of work.

3. Candidates for Honors may receive credit (in hours) for additional work of a high order, which may or may not be in connection with regular courses of instruction.

4. Each department or group of departments that desires to enroll students as candidates for Honors shall submit its proposed requirements to the approval of the Committee on Educational Policy. These requirements may include such items as a minimum amount of work of specified grade in the special subject, general reading in the field of that subject, knowledge of auxiliary subjects, ability to make use of one or more foreign languages, a thesis, and a special examination.

THE DEGREE OF BACHELOR OF CHEMISTRY

The requirements for the degree of Bachelor of Chemistry are residence for eight terms and the completion of the following curriculum. In addition to these requirements the work prescribed by the University in Military Drill or in Physical Training must be completed.

Students who have not presented three units of German and two units of French upon entering the course in chemistry, will be required to make up the shortages in these languages before the beginning of the senior year.

First Year

	No. of Course	First Term	Second Term
Introductory Inorganic Chemistry.....Chemistry	1	6	—
Qualitative Analysis.....Chemistry	7	6 or 0	0 or 6
Analytical Geometry, Differential Calculus, Integral Calculus.....Mathematics	7	5	5
Introductory Experimental Physics.....Physics	2	—	5
Drawing.....Sibley College	D3	3	—
English.....English	1	3	3

Second Year

Quantitative Analysis.....Chemistry	12	0 or 6	6 or 0
Organic Chemistry.....Chemistry	30	6	6
Gas Analysis.....Chemistry	19 & 20	4 or 0	0 or 4
Introductory Physical Experiments.....Physics	10	2	—
Physical Experiments.....Physics	14	—	2
Crystallography.....Geology	12	0 or 3	3 or 0
Opticochemical Methods.....Chemistry	24	—	3
Elective.....		—	3

Third Year

		No. of Course	First Term	Second Term
Introductory Physical Chemistry	Chemistry	50	3	3
Physical Chemistry Laboratory	Chemistry	51	3	3
Chemical Microscopy	Chemistry	65	0 or 2	2 or 0
Quantitative Analysis, Lectures	Chemistry	15	—	2
Advanced Quantitative Analysis	Chemistry	14	2	2
General Physics	Physics	9c	2	—
Physical Experiments	Physics	14	2	—
Mechanics	Sibley College	M5	5	—
Mechanical Laboratory	Sibley College	X12	—	4
Elective			—	3

Students that wish to register in the junior year for a greater number of elective hours than the schedule demands may, with the approval of the Department, be permitted to defer taking some of the required courses of the junior year.

Fourth Year

Electrical Engineering Laboratory	Sibley College	E12	4	—
Seminary	Chemistry	95	—	1
Research	Chemistry	96 (at least)	4	4
Electives	at least		5	5

In choosing his elective subjects in the senior year the student is advised to select as his special field some one of the following seven divisions of chemistry: inorganic chemistry, analytical chemistry, organic chemistry, physical chemistry, chemical microscopy, sanitary chemistry, agricultural chemistry. While the greater part of the elective work should lie in the field thus chosen, the remainder may comprise courses in any division of chemistry, or such other courses as may be approved by the Department of Chemistry.

The provisions of paragraphs 2 aiii, 2b, 2c, 3, 4, 12, 13, 14, and 15 relating to the degree of Bachelor of Arts apply in general to candidates for the degree of Bachelor of Chemistry. A candidate for the latter degree may register for nineteen hours a term. To register for more than nineteen hours in any term he must secure the approval of the Department of Chemistry.

COURSES OF INSTRUCTION

SEMITIC LANGUAGES AND LITERATURES

1. **Hebrew.** Throughout the year, credit three hours a term. Professor SCHMIDT. Open only to juniors, seniors, and graduates.
- 2a. **Arabic.** Throughout the year, credit two hours a term. Professor SCHMIDT. Open only to juniors, seniors, and graduates.
- 2b. **Advanced Arabic.** Throughout the year, credit two hours a term. Prerequisite course 2a. Professor SCHMIDT.
3. **Ethiopic.** Throughout the year, credit two hours a term. Prerequisite courses 1, 2a. Professor SCHMIDT. Primarily for graduates.
- 4a. **Assyrian.** Throughout the year, credit two hours a term. Prerequisite courses 1, 2a. Professor SCHMIDT. Primarily for graduates.
- 4b. **Aramaic.** Throughout the year, credit two hours a term. Prerequisite course 1. Professor SCHMIDT.
- 5a. **Egyptian.** Throughout the year, credit two hours a term. Prerequisite courses 1, 2a. Professor SCHMIDT. Primarily for graduates.
- 5b. **Coptic.** Throughout the year, credit two hours a term. Prerequisite course 5a. Professor SCHMIDT. Primarily for graduates.
6. **Biblical Literature.** Throughout the year, credit two hours a term. Professor SCHMIDT. Open to juniors, seniors, and graduates.
7. **Semitic Seminary.** Throughout the year, credit two hours a term. Prerequisite courses 1, 4b. Professor SCHMIDT.
8. **Comparative Semitic Philology.** Throughout the year, credit one hour a term. Prerequisite courses 1, 2, 4b. Professor SCHMIDT. For graduates only.
- [9a. **Oriental History.** Throughout the year, credit two hours a term. Professor SCHMIDT.] Not given in 1918-1919. Open to juniors, seniors, and graduates.
- 9b. **Oriental History.** Throughout the year, credit two hours a term. Professor SCHMIDT. Open to juniors, seniors, and graduates.

GREEK

1. **Elementary Greek.** Throughout the year, credit six hours a term. This course however is continuous throughout the year, and no credit will be allowed for the first term alone. Assistant Professor JONES.
2. **Plato, Selections; Homer's Odyssey.** Throughout the year, credit three hours a term. Professor BRISTOL and Assistant Professor JONES.
3. **Euripides, Sophocles.** First term, credit three hours. Assistant Professor JONES.
4. **Greek Composition.** Throughout the year, credit one hour a term. Prerequisite course 2 or the equivalent. Assistant Professor JONES.
5. **New Testament Greek.** Throughout the year, credit two hours a term. Dr. WHITE. Prerequisite course 1 or its equivalent.
6. **Herodotus.** First term, credit two or three hours. Professor BRISTOL.
- [7. **Myths of the Epic Cycle.** Second term, credit two hours. Assistant Professor JONES.] Not given in 1918-1919.
9. **Dramatic Poetry.** Second term, credit two hours. Assistant Professor JONES.
- [10. **Lyric Poetry.** First term, credit two hours. Professor BRISTOL.] Not given in 1918-1919.
- [11. **Aristophanes.** Second term, credit two hours. Assistant Professor JONES.] Not given in 1918-1919.
12. **The Republic of Plato.** Throughout the year, credit three hours a term. Professor HAMMOND.
- [15. **Thucydides.** First term, credit two hours. Professor BRISTOL.] Not given in 1918-1919.
20. **Greek Seminary.** Throughout the year, credit two hours a term. Professor BRISTOL. For graduates, and by special permission, qualified seniors.
21. **Introduction to the Study of Language.** First term, credit two hours. Professor BRISTOL. Open to graduates and to properly qualified seniors.
- [25. **Comparative Grammar of Greek, Latin, and Germanic.** Professor BRISTOL.] Not given in 1918-1919.

GREEK ART AND ANTIQUITIES

Courses 1, 2, 3, 4, and 4a in this department do not require any knowledge of Greek or of Latin. Courses 5 and 6 presuppose facility in reading Greek. Course 7 is primarily for those expecting to study in Athens.

A. Greek Art. November to March inclusive. Assistant Professor ANDREWS.

An introductory course of popular illustrated lectures on Greek sculpture, Greek antiquities, and Greek topography. No university credit.

1. **History of Greek Sculpture.** Repeated in second term, credit three hours. Assistant Professor ANDREWS.

Intended to be supplemented by course 3, but may be taken separately. Not open to students who have had course 2.

2. **History of Greek Sculpture.** Throughout the year, credit two hours a term. Assistant Professor ANDREWS. Not open to students who have had course 1. Registrations will not be accepted for the second term only.

3. **Greek Antiquities.** Repeated in second term, credit three hours. Assistant Professor ANDREWS. Intended to be taken with course 1, but may be taken separately.

4. **Greek Numismatics.** First term, credit two hours. Assistant Professor ANDREWS. Preferably to follow course 3.

4a. **Greek Architecture.** Second term, credit two hours. Assistant Professor ANDREWS. Preferably to follow course 3.

5. **Pausanias.** Credit two hours. Assistant Professor ANDREWS.

6. **Greek Epigraphy.** Credit two hours. Assistant Professor ANDREWS. For graduates and qualified undergraduates.

7. **Modern Greek.** Credit two hours. Assistant Professor ANDREWS.

LATIN

A. Elementary Latin; Caesar. Professor ELMER. Credit five hours a term. The course is however continuous throughout the year, and no credit will be allowed for the first term alone.

B. Cicero, Selected Orations; Virgil, Aeneid, Books I-IV. Throughout the year, credit three hours a term. Prerequisite course A or entrance credit for two units of Latin (first year and second year Latin). Professor ELMER. May be entered in the second term by students who have entrance credit for only three units of Latin.

1. **Cicero, De Amicitia; De Senectute; Horace, Odes and Epodes; Latin Writing.** Throughout the year, credit three hours a term. Professors BENNETT and DURHAM.

[2. **Sight Translation: Gellius, Selections; New Testament, Phædrus.**] Not given in 1918-1919.

3. **Sight Translation: Selections from Petronius, Cato, Publilius Syrus, and Early Christian Hymns; One Hundred Best Poems.** Throughout the year, credit one hour a term. Professor ELMER.

Especially recommended as collateral work for those who are taking course 1, but open to all students. Courses 2 and 3 are given in alternate years.

8. **Terence, Phormio and Adelphi; Martial; Horace, Satires and Epistles; Seneca, Letters; Tacitus, Agricola.** Throughout the year, credit three hours a term. Prerequisite course 1. Professor DURHAM.

9. **Sight Translation for Sophomores.** First term, credit one hour. Prerequisite course 1. Professor DURHAM.

10. **Classic Myths in English Literature.** Prerequisite preparatory Latin. Second term, credit two hours. Professor DURHAM.

11. **Ovid, Metamorphoses; Selections from Cicero's Letters.** Throughout the year, credit two hours a term. Prerequisite course 1 or the equivalent. Professor ELMER.

[12. **Selections from the last six books of Virgil's Aeneid; Cicero, De Officiis.** Throughout the year, credit two hours a term. Professor ELMER.] Not given in 1918-1919. Courses 11 and 12 are given in alternate years.

16. **Selections from the Republican Literature: Plautus, the Captives and Mostellaria; Lucretius; Lectures on the History of Roman Literature.** Throughout the year, credit three hours a term. Prerequisite course 8, 11, or 12. Professor BENNETT.

[17. **Literature and History of the Early Empire: Suetonius, Lives of the Caesars; Pliny's Letters; Tacitus's Annals.** Throughout the year, credit three hours a term. Prerequisite course 8, 11, or 12. Professor BENNETT.] Not given in 1918-1919. Courses 16 and 17 are given in alternate years.

18. **Lyric Poetry, Catullus.** First term, credit two hours. Open by special permission to students who are taking course 16. Professor DURHAM.

21. **Intermediate Course in Latin Writing.** Credit one hour a term. Prerequisite course 1. Professor ELMER. This course is continuous throughout the year, and no credit will be allowed for the first term alone.

26. **Teachers' Training Course.** Throughout the year, credit two hours a term. Open, upon personal application to the professor, to students who have had course 8, 11, or 12, and have taken or are taking course 16 or 17. Professor BENNETT.

[27. **Roman Life and Art.** Throughout the year, credit two hours a term. Professor BENNETT.] Not given in 1918-1919. Course 26 and 27 are given in alternate years.

[34. **Cicero, in Verrem, Fourth Oration of the Actio Secunda.** Throughout the year, credit one hour a term. Prerequisite course 8, 11, or 12, or the equivalent. Professor ELMER.] Not given in 1918-1919.

35. **Cicero's Philippics.** Throughout the year, credit one hour a term. Prerequisite course 8, 11, or 12, or the equivalent. Professor ELMER.

45. **Latin Writing, Advanced Course.** Throughout the year. Professor ELMER. For graduates. Undergraduates who have taken course 21 may also be admitted to this course.

47. **Vulgar Latin.** Throughout the year, credit two hours a term. Professor DURHAM.

50. **Latin Epigraphy.** Throughout the year, credit two hours a term. Professor DURHAM. For graduate courses in Latin, see the Announcement of the Graduate School.

GERMAN

1. **Course for Beginners: Oral Training, Grammar, Composition, Translation.** Repeated in second term, credit six hours. Professor POPE and Assistant Professor ANDREWS.

This course is equivalent to first year and second year German of the entrance requirements (credit two units). It may be elected for three hours credit by students who have entrance credit for only one unit of German (first year German).

3. **Oral Training, Grammar, Composition, Translation.** Repeated in second term, credit five hours. Prerequisite course 1 or entrance credit for two units of German (first year German and second year German). Professor BOESCHE and Assistant Professor ANDREWS.

This course is equivalent to third year German of the entrance requirements.

4. **Elementary German Composition and Conversation.** Throughout the year, credit three hours a term. Open to those who are taking or have taken course 3. Professor POPE. It is advisable to combine course 4 with course 3 or 5.

5. **Intermediate German Course.** Throughout the year, credit three hours a term. Prerequisite course 3, or the equivalent. Professor FAUST and Assistant Professor ANDREWS. Course 4 may be combined with course 5, or instead of these, course 7 may be taken.

5a. **Intermediate German Course.** Second term, credit five hours. Prerequisite course 3, or the equivalent. Assistant Professor ANDREWS. This course is equivalent to course 5, which see for prerequisite courses, etc. Primarily for students completing course 3 in the first term.

7. **Intermediate German Course.** Throughout the year, credit five hours a term. Prerequisite course 3, or the equivalent. This course, in two terms, covers the work of courses 4 and 5 (or 5a).

8. **Scientific German.** Second term, credit two hours. Prerequisite courses 1-3, or three years of German in high school. Professor BOESCHE.

10. **Advanced German Composition and Conversation.** Throughout the year, credit three hours a term. Prerequisite courses 1-5, or the equivalent. Professor BOESCHE.

11. **Schiller's Life and Works.** Throughout the year, credit three hours a term. Prerequisite courses 1-5. Professor POPE.

12. **Goethe's Life and Works.** First term, credit three hours. Primarily for juniors and seniors. Prerequisite courses 1-5, or the equivalent. Professor FAUST.

13. **Goethe's Faust, part I and selected portions of part II.** Second term, credit three hours. Primarily for juniors and seniors. Prerequisite courses 1-5, or the equivalent. Professor FAUST.

14. **History of German Literature.** Throughout the year, credit three hours a term. Prerequisite courses 1-5, or the equivalent. Professor FAUST.

[15. **Contemporary German Literature.** Throughout the year, credit three hours a term. Prerequisite courses 1-5, or the equivalent. Professor FAUST.] Not given in 1918-1919.

[16. **The German Drama of the Nineteenth Century.** Throughout the year, credit three hours a term. Prerequisite courses 1-5 and 10, or the equivalent.] Not given in 1918-1919.

17. **The Literature of the Reformation.** First term, credit three hours. Prerequisite courses 1-5 and 10, or the equivalent.

18. **Lessing's Life and Works.** Second term, credit three hours. Prerequisite courses 1-5 and 10, or the equivalent.

[33. **Elementary Phonetics and its Application to the Study of Modern Languages.** First term, credit two hours.] Not given in 1918-1919.

34. **Principles of Word Formation.** First term, credit two hours.

37. **Middle High German.** Throughout the year, credit two hours a term. Prerequisite courses 1-5, 10, and at least six hours of advanced work in German literature. Professor POPE.

38. **Modern Scandinavian.** Throughout the year, credit three hours a term. Assistant Professor ANDREWS. For advanced students.

39. **Teachers' Course in German Composition.** Throughout the year, credit two hours a term. Admission by permission only. Professor BOESCHE.

40. **Teachers' Course in Methods.** Second term, credit two hours. Prerequisite courses 1-5, 10, and eighteen hours of advanced work in German literature or philology. Professor FAUST, assisted by his colleagues of the German Department.

[42. **Gothic.** First term, credit three hours. Professor BOESCHE. Primarily for graduates.] Not given in 1918-1919.

43. **Old High German.** First term, credit three hours. Prerequisite course 37. Professor BOESCHE. Primarily for graduates.

[44. **Old Icelandic.** Throughout the year, credit three hours a term. Assistant Professor ANDREWS. Primarily for graduates.] Not given in 1918-1919.

45. **The Viking Age.** First term, credit one hour. Mr. HERMANSSON.

[46. **Old Norse Mythology.** First term, credit one hour. Mr. HERMANSSON.] Not given in 1918-1919.

[48. **Principles of Germanic Philology.** Second term, credit two hours. Prerequisite course 42. Assistant Professor ANDREWS.] Not given in 1918-1919.

49. **Seminary in German Literature.** First term, credit two hours. Professor FAUST. For graduates only.

50. **Seminary in German Literature.** Second term, credit two hours. Primarily for graduates.

52. **Seminary in German Philology.** Second term, credit two hours. Professor BOESCHE. Primarily for graduates.

ROMANCE LANGUAGES

FRENCH

1. **Elementary Course.** Repeated in the second term, credit six hours.

This course is equivalent to first year French and second year French of the entrance requirements (credit 2 units). It may be elected for three hours credit by students who have entrance credit for only one unit of French (first year French).

3. **Advanced Course.** Repeated in the second term, credit five hours. Prerequisite course 1 or second year entrance French.

3a. **Military French.** Repeated in the second term, credit three hours. Prerequisite course 1 or second year entrance French. Professor MASON.

4. **Advanced Translation.** Throughout the year, credit three hours a term. Prerequisite course 3 or third year entrance French.

Designed primarily for freshmen who have entrance credit for three units of French. It is prerequisite for all the following courses in French, except 5, which may be taken profitably in connection with it.

4a. **Advanced Translation.** Repeated in the second term, credit three hours. Prerequisite course 4. Professor HAMILTON.

5. **Elementary Composition.** Throughout the year, credit three hours a term. Prerequisite course 3 or third year entrance French. Assistant Professor PUMPELLY.

This course should be taken if possible in connection with course 4. New registrations in the second term will be accepted only after consultation with the instructor in charge.

5a. **Advanced Military French.** Throughout the year, credit four hours a term. Prerequisite course 3 or third year entrance French. Assistant Professor PUMPELLY.

6. **History of French Literature.** Throughout the year, credit three hours a term. Prerequisite course 4. Professor MASON.

7. **Literature of the Seventeenth Century.** Throughout the year, credit three hours a term. Prerequisite course 6. Assistant Professor GUERLAC.

[8. **Literature of the Eighteenth Century.** Throughout the year, credit three hours a term. Prerequisite course 6. Professor MASON.] Not given in 1918-1919.

9. **Literature of the Nineteenth Century.** Throughout the year, credit three hours a term. Prerequisite course 6. Professor MASON.

10. **Contemporary French Literature.** Throughout the year, credit three hours a term. Prerequisite course 6. Professor MASON.

13. **French Phonetics.** First term, credit one hour. Prerequisite course 5. Assistant Professor PUMPELLY.

14. **Advanced Composition.** Throughout the year, credit three hours a term. Prerequisite courses 4, 5. Assistant Professor PUMPELLY.

Admission to this course depends upon the grade of work done in course 5; before registration, permission must be obtained from the instructor in charge.

21. **Prose of the Sixteenth Century.** Second term, credit three hours. Prerequisite course 6. Professor MASON.

[22. **Poetry of the Sixteenth Century.** Second term, credit three hours. Prerequisite course 6. Professor MASON.] Not given in 1918-1919.

23. **French Philology.** Throughout the year, credit three hours a term. Prerequisite entrance Latin. Assistant Professor PUMPELLY.

This course should be taken in the junior or the senior year by all students who expect to teach French, and must be taken during the first year of graduate study, if not before, by all candidates for the Master's degree who present French as their major subject.

26. **Old French Texts.** Throughout the year, credit two hours a term. Prerequisite course 23. Primarily for graduates.

27. **Modern French Seminary.** Throughout the year, credit two hours a term. Professor MASON. Primarily for graduates.

30. **The Teaching of French.** Course for teachers. Second term, credit two hours. Open to seniors and graduates who are specializing in French.

ITALIAN

1. **Elementary Course.** Throughout the year, credit three hours a term. Professor HAMILTON. This course may not be taken in the same year as Spanish 1. The course is continuous throughout the year, and no credit will be allowed for the first term alone.

2. **Italian Poetry: Dante, Leopardi, Carducci.** Throughout the year, credit three hours a term. Prerequisite course 1, or second year Italian of the entrance requirements. Professor HAMILTON.

3. **Petrarch and the Renaissance.** Throughout the year, credit two hours a term. Prerequisite course 2. Professor HAMILTON. Primarily for graduates.

[5. **Old Italian.** Throughout the year, credit two hours a term. Professor HAMILTON.] Not given in 1918-1919.

SPANISH

1. **Elementary Course.** Repeated in second term, credit six hours.

2s. **Elementary Course.** For students in Engineering and Agriculture. Throughout the year, credit three hours a term. Not open to students in Arts and Sciences; continuous throughout the year and no credit for first term alone.

3. **Advanced Course.** Repeated in second term, credit five hours. Prerequisite course 1 or second year entrance Spanish.

4. **Advanced Translation.** Throughout the year, credit three hours a term. Prerequisite course 3 or third year entrance Spanish. Assistant Professor STURGIS.

This course is prerequisite for all the following courses in Spanish, except course 5, which may be taken profitably in connection with it.

4a. **Advanced Translation.** Second term, credit five hours. Prerequisite course 3 or third year entrance Spanish. This course is equivalent to course 4. It is intended for students who take course 3 in the first term.

5. **Elementary Composition and Conversation.** Throughout the year, credit three hours a term. Prerequisite course 3 or third year entrance Spanish. It is recommended that this course be taken in connection with course 4. New registrations in the second term will be accepted only after consultation with the instructor in charge.

7. **Advanced Composition and Conversation.** Throughout the year, credit three hours a term. Prerequisite courses 4, 5, or their equivalent.

10. **The Novel in the Nineteenth Century.** Throughout the year, credit three hours a term. Prerequisite course 4 or its equivalent. Assistant Professor STURGIS.

12. **History of Spanish America.** Throughout the year, credit three hours a term. Prerequisite course 4 or its equivalent. Assistant Professor STURGIS.

[14. **History of Spanish Literature.** Throughout the year, credit three hours a term. Prerequisite course 4 or its equivalent.] Not given in 1918-1919.

[21. **Old Spanish.** Throughout the year, credit two hours a term. Primarily for graduates.] Not given in 1918-1919.

[23. **Seminary.** Throughout the year, credit two hours a term. Primarily for graduates.] Not given in 1918-1919.

ROMANCE PHILOLOGY

1. **Low Latin.** Second term, credit two hours. Professor HAMILTON. Primarily for graduates.

2. **Old Provençal.** First term, credit two hours. Professor HAMILTON.

ENGLISH

Courses 1 and 3 are for freshmen; courses 20, 22, 71, and 74 are primarily for sophomores. Prerequisites for admission to the remaining courses, for upperclassmen and graduates, are stated in the description of the courses.

1. **Introductory Course.** Throughout the year, credit three hours a term. Students who have not taken the course in the first term may enter in the second term in sections provided for them. Open only to underclassmen who have satisfied the entrance requirement in English. Freshmen who are candidates for the degree of Bachelor of Arts will ordinarily take course 3, and may not enroll in course 1 except with the consent of the head of the department. Assistant Professor ADAMS, Dr. GILBERT, Messrs. BUNDY and BRADLEY.

3. **English Literature.** Throughout the year, credit four hours a term. Students who have not taken the course in the first term may enter in the second term. Open only to freshmen who are not taking course 1. Professors SAMPSON and STRUNK. Assistant Professors BROUGHTON and SMITH.

5. **Advanced Composition.** Throughout the year, credit three hours a term. Open to upperclassmen who satisfy the instructor that they are proficient in composition. Assistant Professor SMITH.

8. **English Usage and Style.** Throughout the year, credit three hours a term. Prerequisite course 20 or its equivalent. The instructor's permission must be obtained before enrollment in the course. Professor STRUNK.

9. **Teachers' Course.** Second term, credit one hour. Open to seniors and graduates who intend to teach English.

10. **Play Writing.** Throughout the year, credit two hours a term. Open to seniors and graduates who show some special aptitude for the proposed work. Professor SAMPSON.

11. **Old English.** Throughout the year, credit three hours a term. Prerequisite course 1 or 3. Assistant Professor MONROE.

No student will be recommended by the Department for a high school teachership in English unless he has had this course or its equivalent. The course should be taken in the junior year.

12. **Middle English.** Throughout the year, credit two hours a term. Prerequisite course 11. Assistant Professor NORTHUP.

20. **Nineteenth Century Prose.** Throughout the year, credit three hours a term. Prerequisite course 1 or 3. Assistant Professors PRESCOTT, NORTHUP, MONROE, and BROUGHTON.

22. **Nineteenth Century Poetry.** Throughout the year, credit three hours a term. Students who have not taken the course in the first term may enter in the second term. Open to sophomores and upperclassmen. Professors SAMPSON and STRUNK; Assistant Professor PRESCOTT.

25. **Old English Readings.** Second term, credit two hours. Prerequisite first term of course 11. Assistant Professor MONROE.

[30. **Chaucer's Canterbury Tales.** Second term, credit three hours. Prerequisite course 11, 20, or 22. Professor STRUNK.] Not given in 1918-1919.

32. **History of English Literature.** Throughout the year, credit two hours a term. Open to graduates, and to upperclassmen who have taken two full years of English.

37. **Shakespeare.** Throughout the year, credit three hours a term. Open to upperclassmen only. Professor STRUNK.

38. **Eighteenth Century Poetry.** Throughout the year, credit two hours a term. Open to upperclassmen only. First term, Assistant Professor PRESCOTT; second term, Assistant Professor MONROE.

39. **Eighteenth Century Prose.** Throughout the year, credit two hours a term. Open to upperclassmen only. Assistant Professor BROUGHTON.

41. **The English Drama to 1642.** Throughout the year, credit three hours a term. Open to upperclassmen only. Assistant Professor ADAMS.

42. **Elizabethan Non-Dramatic Literature.** First term, credit three hours. Open to upperclassmen only. Assistant Professor ADAMS.

43. **Shakespearean Tragedy.** Second term, credit three hours. Open to upperclassmen only. Assistant Professor ADAMS.

47. **The Principles of Poetry and Versification.** First term, credit three hours. Open to upperclassmen only. Assistant Professor PRESCOTT.

[48a. **American Literature.** First term, credit two hours. Open to seniors and graduates. Assistant Professor PRESCOTT.] Not given in 1918-1919.

48b. **American Literature.** Second term, credit three hours. Open to seniors and graduates. Assistant Professor PRESCOTT.

49. **Pastoral Poetry.** Throughout the year, credit two hours a term. Open to upperclassmen and graduates. Assistant Professor BROUGHTON.

50. **Milton and Spenser.** Throughout the year, credit two hours a term. Open to upperclassmen and graduates. Dr. GILBERT.

52. **Victorian Literature.** Throughout the year, credit three hours a term. Open to upperclassmen and graduates. Assistant Professor NORTHUP.

56a. **The Arthurian Legends.** First term, credit three hours. Open to upperclassmen and graduates. Assistant Professor NORTHUP.

56b. **Middle English Literature.** Second term, credit three hours. Open to upperclassmen and graduates. Assistant Professor NORTHUP.

59. **Dramatic Structure.** Throughout the year, credit three hours a term. Open to seniors and graduates. Professor SAMPSON.

71. **English Translations of Greek and Latin Classics.** Throughout the year, credit three hours a term. Open to sophomores and upperclassmen. Professor COOPER.

72. **Principles of Literary Criticism.** Throughout the year, credit three hours a term. Open to seniors and graduates. Professor COOPER.

[73. **Dante in English.** Throughout the year, credit two hours a term. Open to seniors and graduates.] Professor COOPER. Not given in 1918-1919. To be given in 1919-1920.

74. **English Literary Types.** Throughout the year, credit three hours a term. Open to sophomores and upperclassmen. Professor COOPER.

75. **Methods and Materials in the Study of English.** Throughout the year, credit two hours a term. Open to graduates. Professor COOPER.

76. **Chaucer.** Throughout the year, credit two hours a term. Open to graduates. Professor COOPER.

80. **Victorian Poetry.** For graduates only.

81. **The Tudor-Stuart Drama.** For graduates only. Assistant Professor ADAMS.

82. **Pastoral Poetry.** For graduates only. Assistant Professor BROUGHTON.

83. **Layamon's Brut.** For graduates only. Assistant Professor MONROE.

84. **Elizabethan Bibliography.** For graduates only. Assistant Professor ADAMS.

86. **The Epic and the Romance.** For graduates only. Assistant Professor NORTHUP.

87. **The Phonology, Inflections, and Metre of Old English.** For graduates only. Professor STRUNK.

88. **American Literature.** For graduates only. Assistant Professor PRESCOTT.

89. **The Drama.** For graduates only. Throughout the year. Professor SAMPSON.
 90. **The Georgian and Victorian Drama.** For graduates only. Assistant Professor NORTHUP.
 91. **The Sonnets of Shakespeare.** For graduates only. Throughout the year. Assistant Professor ADAMS.

PUBLIC SPEAKING

1. **Public Speaking.** Throughout the year, credit three hours a term. Professor WINANS, Assistant Professor MUCHMORE.
 1a. **Public Speaking.** Second term, credit three hours. This course repeats the work of the first term in course 1.
 8. **Voice Training.** Repeated in second term, credit one hour. Assistant Professor MUCHMORE.
 8a. **Voice Training.** Second term, credit one hour. Prerequisite course 8 and consent of instructor. Assistant Professor MUCHMORE.
 10. **Oral Reading.** Throughout the year, credit two hours a term. Assistant Professor MUCHMORE.
 [12. **Argument and Debate.** Throughout the year, credit three hours a term. Assistant Professor DRUMMOND.
 For the present a part of this course will be included in course 15.] Not given in 1918-1919.
 15. **Advanced Public Speaking.** Throughout the year, credit three hours a term. Prerequisite five hours in other courses of this department, including three hours of 1 or 1a, and the consent of the instructor. Professor WINANS.
 [16. **Principles of Speech Preparation.** First term, credit two hours. Prerequisite course 1. Professor WINANS. Open to graduates and seniors.] Not given in 1918-1919.
 20. **Seminary.** Throughout the year, credit two hours a term. Professor WINANS and other members of the department.
 29. **Oral Expression for Architects.** First term, credit three hours.

PHILOSOPHY

1. **Problems of Philosophy.** First term, credit three hours. Professor THILLY and Mr. PAINE.
 2. **Logic.** First term, credit three hours.
 3. **Logic.** Second term, credit three hours. Professor CREIGHTON.
 4. **The Fine Arts: their Philosophy and History in Outline.** First term, credit three hours. Professor HAMMOND.
 4a. **The Renaissance.** Second term, credit three hours. Professor HAMMOND.
 5. **History of Philosophy.** Throughout the year, credit three hours a term. Professor CREIGHTON. Open to juniors, seniors, and graduates.
 6. **Moral Ideas and Practice.** Second term, credit three hours. Professor THILLY.
 7. **Ethics.** First term, credit three hours. Professor THILLY.
 7a. **Social and Political Ethics, and the Theory of the State.** Second term, credit three hours. Professor THILLY. For juniors, seniors, and graduates only.
 9. **Philosophical Ideas in Nineteenth Century Literature.** First term, credit three hours. Professor ALBEE.
 9a. **Schopenhauer and Nietzsche.** Second term, credit two hours. Professor ALBEE. Primarily for juniors and seniors.
 11. **Philosophical Results and Applications.** Second term, credit one hour. Open to all students who have taken at least one course in philosophy. Professor CREIGHTON.
 12. **The Theory of Evolution: Its History and Significance.** Throughout the year, credit one hour a term. Mr. PAINE.
 13. **Origin and Development of Religious Ideas.** First term, credit two hours. Mr. PAINE.
 14. **Psychology and Philosophy of Religion.** Second term, credit two hours. Mr. PAINE.
 16. **Reading of Philosophical German.** Throughout the year, credit one hour a term. Professor HAMMOND.
 17. **Sources of Ancient and Medieval Philosophy.** Second term, credit two hours. Professor HAMMOND. Primarily for graduates, and open to seniors only by special permission.
 [18. **Types of Metaphysical Theory.** First term, credit two hours. Prerequisite course 1 or 5 or the equivalent. Professor CREIGHTON.] Not given in 1918-1919.
 19. **The Development of Modern Philosophical Problems.** First term, credit three hours. Prerequisite course 5 or its equivalent. Professor CREIGHTON.
 20. **History of Ethics, Ancient, Medieval, and Renaissance.** First term, credit two hours. Professor HAMMOND. Primarily for seniors and graduates.
 21. **History of Modern Ethics.** Second term, credit two hours. Professor ALBEE. Primarily for seniors and graduates.
 26. **Advanced Ethics.** Throughout the year, credit three hours a term. Professor THILLY. Primarily for graduates.

27. **The Republic of Plato.** Throughout the year, credit three hours a term. Professor HAMMOND.
- [29. **Modern Idealistic Theories of Ethics.** Throughout the year, credit three hours a term. Professor THILLY. Primarily for graduates.] Not given in 1918-1919.
30. **Empiricism and Rationalism.** First term, credit three hours. Professor ALBEE. Primarily for graduates.
31. **The Critical Philosophy of Kant.** Second term, credit three hours. Professor ALBEE. Primarily for graduates.
32. **Early Rationalism: Spinoza and Leibniz.** Second term, credit two hours. Professor ALBEE. Primarily for graduates.
33. **The Philosophy of Bergson.** First term, credit two hours. Professor ALBEE. Primarily for seniors and graduates.
- [34. **Logical Theory.** Throughout the year, credit two hours a term. Professor ALBEE. Primarily for graduates.] Not given in 1918-1919.
- [35. **Problems and Methods of Recent Philosophy.** Throughout the year, credit two hours a term. Professor ALBEE. Primarily for graduates.] Not given in 1918-1919.
37. **Seminary in Ethics.** Throughout the year, credit two hours a term. Professor THILLY.
38. **Seminary in Ancient and Medieval Philosophy.** Throughout the year, credit two hours a term. Professor HAMMOND.
40. **Seminary in Logic and Metaphysics.** Professor CREIGHTON and Mr. PAINE.
41. **Seminary in Aesthetics.** Throughout the year, credit two hours a term. Professor HAMMOND. Open to seniors by permission.

PSYCHOLOGY

1. **Elementary Psychology.** First term, credit three hours. Professor TITCHENER, Assistant Professor WELD. Not open to juniors or seniors. Primarily for sophomores in the College of Arts and Sciences.
- 1a. **Elementary Psychology.** First term, credit three hours. Mr. HOISINGTON. Open to juniors and seniors.
- 1b. **Elementary Psychology.** Second term, credit three hours. Mr. HOISINGTON. Open to juniors and seniors.
2. **General Psychology: Problems and Points of View.** Second term, credit three hours. Prerequisite course 1, 1a, or 1b. Assistant Professor WELD.
3. **Experimental Psychology: Qualitative.** Repeated in second term, credit three hours. Prerequisite course 1, 1a, or 1b. Assistant Professor WELD.
4. **Experimental Psychology: Quantitative.** Repeated in second term, credit three hours. Prerequisite courses 1, 1a, or 1b, and 3. Assistant Professor WELD.
5. **Systematic Psychology: Sensation, Image, Perception, Idea.** First term, credit three hours. Prerequisite course 3, or by special permission course 2. Assistant Professor WELD.
6. **Systematic Psychology: Feeling, Attention, Action, Thought.** Second term, credit three hours. Prerequisite course 3, or by special permission course 2. Assistant Professor WELD.
9. **Psychological Problems.** Throughout the year, credit one to five hours a term. Prerequisite course 4. Assistant Professor WELD.
- A Training Course for students who wish to apply for induction into the Government Service as Psychological Examiners is given in cooperation with the Department of Education. For special announcement and other information, concerning this course inquire of Professor R. M. Ogden, Goldwin Smith Hall, 246.

EDUCATION

Psychology 1, 1a, or 1b is prerequisite to all courses in Education.

1. **Educational Psychology.** Repeated in second term, credit three hours. Professor OGDEN and Mr. HOISINGTON.
2. **Principles of Education.** First term, credit three hours. Professor OGDEN. Prerequisite Education 1.
3. **History of Education.** Second term, credit three hours. Mr. HOISINGTON. Prerequisite Education 1.
4. **High School Teachers and Teaching.** Second term, credit two hours. Professor BRISTOL. For seniors only.
5. **Philosophy of Education.** Second term, credit three hours. Professor OGDEN. Prerequisite Education 1, and at least one course in philosophy.
6. **Experimental Methods and Results in Education.** Second term, credit two hours. Mr. HOISINGTON. Prerequisite Education 1.
7. **Mental Tests.** Repeated in second term, credit three hours. Mr. HOISINGTON. Prerequisite Education 1 and Psychology 3.
8. **Experimental Investigation.** Repeated in second term, credit to be arranged. Professor OGDEN and Mr. HOISINGTON. Prerequisite Education 7.
9. **Reading of German Educational Psychology.** First term, credit two hours. Professor OGDEN. Prerequisite Education 1.

10. **Educational Method.** First term, credit two hours. Professor OGDEN. Prerequisite Education I.

20. **Seminary in Education.** Throughout the year, credit two hours a term. Professor OGDEN. Prerequisite Education I.

A Training Course for students who wish to apply for induction into the Government Service as Psychological Examiners is given in cooperation with the Department of Psychology. For special announcement and other information, inquire of Professor R. M. Ogden, Goldwin Smith Hall, 246.

HISTORY

A. **The History of Civilization.** Throughout the year. Professors SCHMIDT, BURR, BECKER, and others. Open to all students and to the public, but no university credit will be given.

1. **Greek and Roman History.** First term, credit three hours. Professor SCHMIDT.

2. **Greek and Roman History.** Second term, credit three hours. Professor SCHMIDT.

7. **Seminary in Greek and Roman History.** Throughout the year, credit two hours a term. Professor SCHMIDT. Open to graduates and qualified undergraduates.

11. **The Middle Ages.** First term, credit three hours. Professor BURR.

12. **The Renaissance and the Reformation.** Second term, credit three hours. Professor BURR.

14. **Medieval Life.** First term, credit one hour. Professor BURR. A reading knowledge of Latin (as much, say, as is needed to read Cæsar or Livy) is prerequisite.

15. **The Rise of Tolerance.** Throughout the year, credit two hours a term. Professor BURR. Course 75 should, if possible, be taken at the same time.

[16. **Canon Law.** Throughout the year, credit two hours a term. Professor BURR. Primarily for graduates, but open by permission to qualified seniors.] Not given in 1918-1919.

22. **History of Modern Europe.** Throughout the year, credit three hours a term. Professor BECKER.

23. **The French Revolution.** First term, credit two hours. Professor BECKER.

24. **The Napoleonic Era.** Second term, credit two hours. Professor BECKER. Prerequisite course 22 or 23, or special permission of the instructor.

28. **Seminary in Modern European History.** Throughout the year, credit two hours a term. Professor BECKER.

31. **English History to 1603.** First term, credit three hours. Acting Assistant Professor SWEET.

32. **English History after 1603.** Second term. Continuation of course 31.

33. **English Constitutional History to the Sixteenth Century.** Second term, credit three hours. Prerequisite course 31. Acting Assistant Professor SWEET.

34. **English History during the Tudor Period.** First term, credit three hours. Acting Assistant Professor SWEET.

35. **English History during the Stuart Period.** Second term, credit three hours. Acting Assistant Professor SWEET. A continuation of course 34. May be elected independently.

52. **American History, 1783 to 1850.** First term, credit three hours. Professor HULL.

53. **American History, 1850 to 1875.** Second term, credit three hours. Professor BRETZ.

54. **Economic History of the Colonies, 1600 to 1800.** First term, credit three hours. Professor HULL.

55. **Economic History of the United States, since 1800.** Second term, credit three hours. Professor HULL.

56. **Constitutional History of the United States since 1860.** First term, credit three hours. Prerequisite courses 52 and 53, or the equivalent. Professor BRETZ.

59. **American History. The Settlement of the Middle West.** Second term, credit three hours. Professor BRETZ.

61. **Seminary.** Throughout the year, credit two hours a term. Professors HULL and BRETZ.

62. **Foreign Relations of the United States in the First Century of Independence.** Second term, credit three hours. Prerequisite course 52. Professor HULL.

63. **American History since 1875.** First term, credit three hours. Prerequisite course 53. Professor BRETZ.

[71. **The Sciences Auxiliary to History.** First term, credit one hour. Professor BURR. Not open to underclassmen.] Not given in 1918-1919.

72. **Historical Geography.** Throughout the year, credit one hour a term. Professor BURR. Not open to underclassmen, and intended for those who have given much attention to history.

73. **Palæography and Diplomatics.** Throughout the year, credit one hour a term. Professor BURR.

75. **Historical Method.** First term, credit one hour. Professor BURR. Open only to seniors and graduates, and intended especially for those who are looking forward to the teaching of history or to historical research.

76. **The Teaching of History.** Course for teachers. Second term, credit two hours. Professor BURR with aid from his colleagues. Open only to seniors and graduates who are specializing in history.

77. **Introduction to the Literature of History.** Professors SCHMIDT, BURR, BECKER, HULL, BRETZ, and SWEET. For graduates only.

Oriental History. See Semitic Languages and Literatures, courses 9a, 9b.

POLITICAL SCIENCE

51. **Elementary Economics.** Throughout the year, credit three hours a term. Professor DAVENPORT, Assistant Professors USHER and REED, Mr. FISHER and Mr. WORKING.

52. **Elements of Economics.** Throughout the year, credit two hours a term. Mr. CAMPBELL. A special course for students in civil and mechanical engineering. Not open to students in other colleges.

53a. **Political Institutions.** First term, credit three hours. Professor ORTH and Assistant Professor SABY.

53b. **Comparative Politics.** Second term, credit three hours. Professor ORTH and Assistant Professor SABY.

54a. **Municipal Administration.** First term, credit three hours. Open to upperclassmen. Assistant Professor SABY.

54b. **State Administration.** Second term, credit three hours. Prerequisite course 53a. Professor ORTH.

54c. **Municipal Problems.** Second term, credit three hours. Open to upperclassmen. Assistant Professor SABY.

55a. **Elementary Social Science.** First term, credit three hours. Course 51 should precede or be taken with this course. Professor WILLCOX.

55b. **Elementary Social Science.** Second term, credit three hours. Course 51 should precede or be taken with this course. Professor WILLCOX. Open to all who have taken 55a and by special permission to others.

56a. **Elements of Business Law.** First term, credit two hours. Professor ORTH. Open to upperclassmen in all colleges except Law.

56b. **Government Control of Industry.** Second term, credit three hours. Prerequisite course 56a. Professor ORTH. Open to upperclassmen in all colleges except Law.

Courses 56a and 56b are designed primarily to meet the needs of students who contemplate entering business and not the profession of law, and credit for these courses will not be given to law students.

58a. **Elements of Accounting.** Repeated in second term, credit three hours. Prerequisite course 51 or its equivalent. Professor ENGLISH.

58b. **Principles of Accounting.** Repeated in second term, credit three hours. Prerequisite course 58a. Professor ENGLISH.

59a. **Accounting Problems.** First term, credit three hours. Prerequisite course 58b. Professor ENGLISH.

59b. **Cost Accounting.** Second term, credit three hours. Prerequisite course 58b. Professor ENGLISH.

[60. **The American Party System.** First term, credit two hours. Prerequisite course 53a. Professor ORTH.] Not given in 1918-1919.

62. **Industrial Organization.** First term, credit two hours. Prerequisite courses 51 and 58a; or 58a may be taken at the same time. Professor KIMBALL. Seniors and graduates; others by permission.

63a. **Corporation Finance.** First term, credit three hours. Assistant Professor REED.

64. **Money and Banking.** Throughout the year, credit three hours a term. Prerequisite course 51. Assistant Professor REED.

65a. **General Problems of Industrial History.** First term, credit three hours. Prerequisite, course 51, previously or concurrently. The course may also be taken by students who have had courses in English history. Assistant Professor USHER.

65b. **Social and Economic Problems of the 19th Century in England.** Second term, credit three hours. Prerequisite course 51, previously or concurrently. Assistant Professor USHER. The course can be followed most profitably by students who have taken course 65a, but it may be elected independently.

66a. **Labor Problems.** Second term, credit three hours. Prerequisite course 51. Mr. CAMPBELL.

70a. **Public Finance.** First term, credit three hours. Prerequisite course 51. Mr. CAMPBELL.

76a. **Elementary Statistics.** First term, credit three hours. Prerequisite course 51. Professor WILLCOX.

76b. **Economic Statistics.** Second term, credit three hours. Prerequisite course 51. Professor WILLCOX.

[78a. **International Law and Diplomacy.** First term, credit three hours. President SCHURMAN and Assistant Professor SABY. Open to upperclassmen in Arts and Sciences, to students in Law, and to approved upperclassmen in other colleges.] Not given in 1918-1919.

[78b. **Constitutional Government.** Second term, credit three hours. Prerequisite course 53a. Professor ORTH.] Not given in 1918-1919.

79a. **History of Political Thought.** First term, credit three hours. Assistant Professor SABY. For advanced students in Political Science.

79b. **Modern Political Thought.** Second term, credit three hours. Assistant Professor SABY. For advanced students in Political Science.

79c. **The Nature of the State.** Second term, credit two hours. Assistant Professor SABY. For advanced students in Political Science.

[80. **Commerical Policies and Imperialism.** First term, credit three hours. Prerequisite course 51. Assistant Professor USHER.] Not given in 1918-1919.

[81. **The History of Price Making and the Growth of Produce Exchanges.** Second term, credit three hours. Prerequisite course 51; open by special permission to those who have had courses in European history. Assistant Professor USHER.] Not given in 1918-1919.

86. **Public Revenues.** Throughout the year, credit three hours a term. Professor DAVENPORT. Primarily for advanced and graduate students.

87a. **Principles of Economics.** First term, credit four hours. Professor DAVENPORT. Primarily for students majoring in economics who have had, preferably, one to two years of work in advance of 51; or for mature or graduate students desiring an introductory course more searching and difficult than 51.

90. **General Problems of Economic History.** Throughout the year, credit two hours a term. Assistant Professor USHER. Primarily for gradates.

91. **Research in Statistics.** Throughout the year, credit to be arranged. Professor WILLCOX.

93. **Research in Accounting.** Throughout the year, credit two or three hours a term. Assistant Professor ENGLISH.

94. **Research in Politics.** Throughout the year, credit one to three hours a term. Professor ORTH.

95. **Seminary in Political Science and Public Law.** Throughout the year, credit two hours a term. Professor ORTH. Open to especially qualified students by permission of the professor in charge.

99. **General Seminary.** Throughout the year. Conducted by members of the department. Open only to graduate students and departmental honor students in senior year.

Rural Economy. See Rural Economy in College of Agriculture.

BIBLIOGRAPHY

1. **Bibliography.** First term, credit two hours. Librarian AUSTEN.

2. **Bibliography.** Second term, credit two hours. Librarian AUSTEN.

MUSIC

The courses offered by the Department of Music are designed to afford to all students having sufficient native ability, the opportunity to study music as a part of the college course. The aim is to make musical training contribute to liberal culture.

1. **Elementary.** Open to all students showing sufficient aptitude to pursue the subject with profit. Throughout the year, credit two hours a term. Professor DANN.

3. **Intermediate.** Open to students who have completed course 1 or who meet the requirements prescribed in course 1. Throughout the year, credit two hours a term. Professor DANN.

5. **Choral.** Open to any student possessing a voice of satisfactory quality and volume, who is qualified to sing the larger choral works given at the annual musical festival. Throughout the year, credit one hour a term. Professor DANN.

7. **Advanced Choral.** Throughout the year, credit two hours a term. Professor DANN. Members of this class constitute the choir at the Sunday Vesper Service in Sage Chapel and form a part of the festival chorus.

10. **Harmony.** Prerequisite course 1, or the equivalent. Throughout the year, credit two hours a term. Assistant Professor QUARLES.

12. **Advanced Harmony and Elementary Form.** Open to students who have completed course 10 and to others equally qualified. Throughout the year, credit two hours a term. Assistant Professor QUARLES.

14. **Applied Form and Composition.** Open to students who have completed course 12, and to others equally qualified. Throughout the year, credit two hours a term. Assistant Professor QUARLES. It is recommended that courses 14 and 16 be taken simultaneously.

16. **Counterpoint.** Open to students who have completed course 12, and to others equally qualified. Throughout the year, credit two hours a term. Assistant Professor QUARLES.

18. **History and Appreciation of Music.** No preliminary training required. Throughout the year, credit two hours a term. Assistant Professor QUARLES.

MATHEMATICS

1. **Solid Geometry.** Repeated in second term, credit three hours.

2. **Advanced Algebra.** Repeated in second term, credit five hours.

2 (E). **Advanced Algebra.** First term, credit three hours. Prerequisite, the entrance requirements in intermediate algebra.

3. **Plane Trigonometry.** Repeated in second term, credit three hours.

5, 6, 7, 8. **Analytic Geometry and Calculus.** Prerequisite courses 1, 2, 3, or their equivalent. Designed primarily for students in the following colleges: 5, the College of Civil Engineering; 6, Sibley College; 7, the College of Arts and Sciences, including students in Chemistry; 8, the College of Architecture.

5 (1). Credit five hours. Repeated in the second term.

5 (2). A continuation of the work of 5 (1). Second term.

6 (1). Credit six hours. Repeated in the second term.

6 (2). A continuation of the work of 6 (1). Credit six hours. Repeated in the first term of the following year.

7 (1). Credit five hours. Repeated in the second term.

7 (2). A continuation of the work of 7 (1). Credit five hours.

8. Throughout the year, credit three hours a term.

15. **Elementary Course in Higher Mathematics.** Throughout the year, credit two hours a term. Prerequisite courses 1, 2, and 3, or their equivalent.

17. **Advanced Problems.** Throughout the year, credit three hours a term. Prerequisite course 7.

19. **Descriptive Geometry.** First term, credit three hours. Professor SNYDER.

[20. **Teachers' Course.** Throughout the year, credit three hours a term.] Not given in 1918-1919.

41. **Elementary Differential Equations.** Throughout the year, credit three hours a term. Prerequisite course 7 or its equivalent. Assistant Professor GILLESPIE.

42. **Advanced Calculus.** Throughout the year, credit three hours a term. Prerequisite course 7 or its equivalent. Assistant Professor OWENS.

45. **Theory of Functions of a Complex Variable.** Throughout the year, credit three hours a term. Assistant Professor CRAIG.

61. **Projective Geometry.** Throughout the year, credit three hours a term. Prerequisite course 7 or its equivalent. Assistant Professor CARVER.

65. **Analytic Geometry of Space.** Second term, credit three hours. Prerequisite courses 61, 62. Professor SNYDER.

68. **Line Geometry.** Second term, credit three hours. Prerequisite courses 7 and 61. Assistant Professor RANUM.

80. **Differential Equations of Mathematical Physics.** Throughout the year, credit three hours a term. Assistant Professor HURWITZ. Course 42 or its equivalent is essential.

82. **Introduction to the Mathematics of Finance.** Throughout the year, credit two hours a term. Professor TANNER.

83. **Theory of Probabilities.** Throughout the year, credit three hours a term. Professor MCMAHON.

83a. **Introduction to Actuarial Science.** Throughout the year, credit three hours a term. Prerequisite courses 7, 82, 83, or equivalents. For desirable preparatory courses in statistics and accounting consult the professor in charge. Professor MCMAHON.

86. **Hydrodynamics.** First term, credit three hours. Prerequisite course 7. Assistant Professor SHARPE. Designed for students in Physics and Engineering.

88. **Elasticity.** Second term, credit three hours. Prerequisite course 7. Assistant Professor SHARPE.

PHYSICS

2. **Introductory Experimental Physics.** Repeated in second term, credit five hours. Professors NICHOLS and GIBBS, and Messrs. BITNER, GRANTHAM, HYATT, MCBERTY, MERTZ, NORTHROP, PIERCE, and STANTON, and Miss ROTHWELL. Required of candidates for B.Chem., C.E., B.S., and D.V.M.

Entrance physics is not accepted as an equivalent of this course.

3. **Introductory Experimental Physics.** Primarily for students in mechanical and electrical engineering. Repeated in second term, credit six hours. Professor NICHOLS and GIBBS, and Messrs. BITNER, GRANTHAM, HYATT, MCBERTY, MERTZ, NORTHROP, PIERCE, and RODGERS. Entrance physics is not accepted as an equivalent of this course.

4a. **General Physics.** Primarily for Arts students. Class-room work covering heat, magnetism, and electricity. First term, credit three hours. Prerequisite course 2 or 3. Professor GIBBS.

4b. **General Physics.** Primarily for students in Arts and Sciences. Classroom work covering properties of matter, sound, and light. Second term, credit three hours. Prerequisite Physics 2 or 3. Professor GIBBS.

7. **General Physics.** Primarily for students in civil engineering. Repeated in second term, credit three hours. Prerequisite Physics 2. Mr. MCBERTY.

8. **Mechanics and Heat.** Primarily for students in mechanical and electrical engineering. Second term, repeated first term following year, credit two hours. Prerequisites Physics 3, and Mathematics 6 (1). Mathematics 6 (2) must be taken in parallel. Assistant Professor BIDWELL, and Mr. SCHELLENG.

9. **Electricity and Magnetism.** Primarily for students in mechanical and electrical engineering. Repeated in second term, credit two hours. Prerequisite Physics 8. Instructing staff as in Physics 8. The course is a continuation of Physics 8.

- 9c. **Magnetism, Electricity, and Heat.** First term, credit two hours. Required of candidates for B.Chem. Prerequisites: Physics 2, two hours of Physics 10, and two hours of Physics 14. Two additional hours of 14 must be taken with 9c. Mr. SCHELLENG.
10. **Introductory Physical Experiments.** Either term or throughout the year, credit one to three hours a term. May be elected by students that are taking or have completed Physics 2, 3, 4, or 7. Assistant Professor RICHTMYER and Miss WHITE.
12. **Physical Experiments.** Primarily for students in the College of Arts and Sciences. Either term or throughout the year, credit one to four hours a term. Prerequisites: calculus and at least eight hours of physics, taken from Physics 2, 3, 4, 7, and 10, or the equivalent. Assistant Professors RICHTMYER and BIDWELL. Students electing two hours of University credit take one three-hour period a week.
14. **Physical Experiments.** Primarily for candidates for B.Chem., C.E., and M.E. Either term or throughout the year, credit one to four hours a term. Prerequisite analytic geometry and the calculus; and at least seven hours of Physics taken from preceding courses, or Physics 3 if Physics 8 and 9 be taken in parallel, or the equivalent. Assistant Professor BIDWELL, and Messrs. SCHELLENG and RICHMOND.
15. **Special Laboratory Work.** For undergraduates under direction of any member of the staff. Prerequisite, 12 or 14. Credits as arranged.
17. **Practice Course for Teachers.** Second term, credit three hours. Prerequisite Physics 2, Physics 4a and 4b, and two hours of Physics 10, or the equivalent. Professor GIBBS.
18. **Theory and Practice of Photography.** Repeated in second term, credit two hours. Prerequisite, the knowledge of chemistry and physics that in general is possessed by those who have completed Chemistry 1 and Physics 2. Professor NICHOLS, Mr. RODGERS, and Miss SEVERANCE.
19. **Advanced Photography,** with special reference to its application to research. Repeated in second term, credit one to four hours. Prerequisite courses 2, 10 or 14, and 18, or the equivalent. Professor NICHOLS, Mr. RODGERS, and Miss SEVERANCE.
- [20. **Heat.** First term, credit five hours. Mr. MURDOCK.] Not given in 1918-1919.
21. **Light.** Second term, credit five hours. Mr. MURDOCK.
- [22. **Electricity and Magnetism.** Second term, credit five hours. Mr. MURDOCK.] Not given in 1918-1919.
23. **Properties of Matter.** First term, credit five hours. Mr. MURDOCK.
24. **Sound.** Second term, credit two hours. Mr. MURDOCK.
25. **Advanced Laboratory Practice.** Either term or throughout the year, credit one to three hours a term. Mr. MURDOCK.
26. **Photometry and Illumination.** First term, credit one to four hours a term. Prerequisite Physics 14. Assistant Professor RICHTMYER.
27. **Advanced Photometry and Illumination.** Repeated in second term, and throughout the year. Credit, two to six hours a term. Prerequisite Physics 26. Assistant Professor RICHTMYER.
28. **Spectrophotometry.** Repeated in second term, credit two to four hours. Prerequisite Physics 14. Assistant Professor RICHTMYER. Students who have had course 26 may complete course 28 in two hours.
29. **High Temperature Measurements.** Laboratory and lectures as arranged. First term, credit two or four hours. Prerequisite Physics 12 or 14. Primarily for juniors and seniors specializing in Physics. Assistant Professor BIDWELL.
33. **Alternating Currents.** First term, credit two hours. Prerequisite course 12 or 14. Professor BEDELL.
34. **Electrical Laboratory.** Either term or throughout the year, credit as arranged. Prerequisite course 12 or 14. Professor BEDELL and Mr. MERTZ.
36. **Advanced Alternating Currents.** Second term, credit two hours. Prerequisite course 33. Professor BEDELL.
37. **Theses in Applied Electricity.** Second term, or throughout the year, credit two to eight hours a term. Prerequisite course 12 or 14. Professor BEDELL.
38. **Aerodynamics and the Mechanics of Flight.** First term, credit two hours. Prerequisite Physics 14. Professor BEDELL.
- [40. **Recent Advances in Experimental Physics.** Throughout the year, credit one hour a term. Professor MERRITT.] Not given in 1918-1919.
- [40a. **Electric Waves and Oscillations.** Second term. Credit one to four hours. Professor MERRITT. Prerequisites ordinarily course 14 and one term of course 40, or their equivalent.] Not given in 1918-1919.
41. **Fluorescence and Phosphorescence.** First term, credit one hour. Prerequisite course 10 or 14. Professor NICHOLS.
- [42. **History of Physics in the 19th Century.** Second term, credit one hour. Prerequisite course 2. Professor NICHOLS.] Not given in 1918-1919.
- [42a. **History of the Electric Transmission of Intelligence.** Second term, credit one hour. Prerequisite course 2. Professor NICHOLS.] Not given in 1918-1919.
- [43. **Photometry and the Physics of Illumination.** First term, credit two hours. Prerequisite course 10 or 14. Professor NICHOLS.] Not given in 1918-1919.
44. **X-Ray Photography.** Second term, credit two hours. Prerequisite courses 2 and 10, and a knowledge of ordinary photography. Mr. LARKIN.

45. **Radioactivity and Allied Phenomena.** Throughout the year, credit three hours a term.
46. **Radiation.** Second term, credit two hours. Prerequisite Physics 20 or its equivalent. Assistant Professor BIDWELL. Primarily for graduates.
47. **Advanced X-Ray Laboratory.** Either term. Mr. LARKIN. Open to students who have completed course 44.
- 48a. **Electrolysis.** First term, credit one hour.
- 48b. **Primary and Reversible Batteries.** Second term, credit one hour.
50. **Physics Seminary.** Throughout the year, credit two hours a term. Professor NICHOLS.
- 50b. **Junior Physics Seminary.** Throughout the year, credit one hour a term. Assistant Professor RICHTMYER.
- [51. **Theoretical Physics.** Mechanics and thermodynamics. Throughout the year, credit four hours a term. Professor MERRITT. Primarily for graduates.] Not given in 1918-1919.
- [52. **Theoretical Physics.** Electricity and magnetism. Throughout the year, credit four hours a term. Professor MERRITT. Primarily for graduates.] Not given in 1918-1919.
53. **Mechanics.** Throughout the year, credit three hours a term. Professor GIBBS. Primarily for graduates.
54. **Thermodynamics.** Throughout the year, credit two or three hours a term. Prerequisite courses 2, 7 or 10, 14. Physics 20 is advised, though not required, as a preliminary course. Professor TREVOR.
57. **Photoelectricity.** First term, credit two hours. Assistant Professor RICHTMYER.

CHEMISTRY

INTRODUCTORY INORGANIC CHEMISTRY

1. **Introductory Inorganic Chemistry.** Repeated in second term, credit six hours. Professor BROWNE, Messrs. GRIFFIN, FOGLESONG, COLONY, and HUBACH.

ANALYTICAL CHEMISTRY

6. **Qualitative and Quantitative Analysis.** Repeated in second term, credit five hours. Prerequisite course 1. Messrs. RIDER, CLARK and LEPPART.
7. **Qualitative Analysis.** Repeated in second term, credit six hours. Prerequisite course 1. Mr. RIDER.
- [9. **Advanced Qualitative Analysis.** Repeated in second term, credit one, two, or three hours. Prerequisite courses 7, 12, and 30. Mr. RIDER. For graduates and advanced undergraduates.] Not given in 1918-1919.
12. **Quantitative Analysis, Elementary Course.** Repeated in second term, credit six hours. Prerequisite course 6 (or preferably 7). Messrs. WYCKOFF and NILL.
14. **Quantitative Analysis, Advanced Course.** Repeated in second term, credit two to four hours. Prerequisite course 6 (or 7 and 12). Messrs. WYCKOFF and NILL.
15. **Quantitative Analysis, Advanced Lectures.** Second term, credit two hours. Prerequisite course 6 (or 7 and 12). Mr. WYCKOFF.
16. **Electrochemical Analysis.** Repeated in second term, credit one to two hours. Prerequisite course 6 (or 7 and 12). Mr. WYCKOFF.
- [18. **Assaying.** First term, credit three hours. Prerequisite course 6 (or 7 and 12), and if possible a course in mineralogy. Mr. WYCKOFF.] Not given in 1918-1919.
19. **Qualitative and Quantitative Gas Analysis.** Repeated in second term, credit two hours. Prerequisite course 6 (or 7) and Physics 2. Course 19 should be preceded or accompanied by course 12.
20. **Technical Gas Analysis.** Repeated second term, credit two hours. Open to those who are taking or have taken course 19. Mr. WINTRINGHAM.
21. **Gas Analysis, Advanced Course.** Repeated in second term, credit one or more hours. Prerequisite courses 19 and 20.
24. **Opticochemical Methods.** Second term, credit three hours. Prerequisite course 6 (or 7 and 12) and Physics 2 and 10. Mr. HASSELBECK.
25. **Opticochemical Methods, Advanced Course.** First term, credit one or more hours. Prerequisite course 24.

ORGANIC CHEMISTRY

30. **Organic Chemistry.** Throughout the year, credit six hours a term. Prerequisite course 6 (or 7 and 12). Open to those who are taking course 12. Professor ORNDORFF, and Messrs. JACKSON, FRIDERICI and CORNWELL.
31. **Organic Chemistry.** Throughout the year, credit three hours a term. Prerequisite course 6 (or 7 and 12). Open to those who are taking course 12. Professor ORNDORFF, and Mr. CORNWELL.
32. **Elementary Organic Chemistry.** First term, credit: with laboratory, four hours; lectures only, three hours. Students who are preparing for the study of medicine must take the laboratory work. Prerequisite course 6 (or 7 and 12). Open to those who are taking course 12. Messrs. JACKSON, and CORNWELL.
33. **Special Chapters in Organic Chemistry.** Throughout the year, credit two hours a term. Prerequisite course 30. Professor ORNDORFF and Mr. CORNWELL.

34. **Advanced Organic Chemistry.** Throughout the year, credit two to six hours a term. Open to those who have had or are taking course 33. Professor ORNDORFF and Mr. JACKSON.

35. **The Coal Tar Dyestuffs.** First term, credit one hour. Open to those who have had course 30 and have had or are taking course 33. Professor ORNDORFF.

[36. **Stereochemistry.** First term, credit one hour. Prerequisite course 30 or 31. Professor ORNDORFF.] Not given in 1918-1919.

37. **Methods of Organic Analysis.** Throughout the year, credit two to six hours a term. Prerequisite course 30. Professor ORNDORFF and Mr. JACKSON.

38. **The Coal Tar Dyestuffs.** Laboratory practice. Throughout the year, credit two to four hours a term. Open to those who have had or are taking course 33. Professor ORNDORFF and Mr. JACKSON.

INORGANIC CHEMISTRY

[46. **Advanced Inorganic Chemistry.** Throughout the year, credit two hours a term. Prerequisite course 30, and open to those who have completed or are taking courses 50 and 51. Professors DENNIS and BROWNE, and Mr. BULL.] Not given in 1918-1919.

47. **Advanced Inorganic Chemistry.** Laboratory practice. Either term, credit, two, three, or four hours. Prerequisite course 30. Professors DENNIS and BROWNE.

Course 47 is designed to accompany course 46, but either course may be taken separately.

[48. **Selected Topics in Advanced Inorganic Chemistry.** Throughout the year, credit two hours a term. Prerequisite course 30. Courses 50 and 51 should precede or accompany this course. Professor BROWNE.] Not given in 1918-1919.

[49. **Chemistry of Gases.** First term, credit one hour. Prerequisite course 6 (or 7 and 12), and should be preceded or accompanied by 19 and 20.] Not given in 1918-1919.

PHYSICAL CHEMISTRY

50. **Introductory Physical Chemistry.** Throughout the year, credit three hours a term. Prerequisite course 30 or 32, and Physics 2 and 10. Assistant Professor BRIGGS and Messrs. HOOD and DUCASSÉ.

51. **Physical Chemistry Laboratory.** Throughout the year, credit three hours a term. Open only to those who have taken or are taking course 50. Assistant Professor BRIGGS and Mr. HOOD.

[52. **Advanced Physical Chemistry.** Throughout the year, credit three hours a term. Prerequisite course 50.] Not given in 1918-1919.

53. **Applied Colloid Chemistry.** Throughout the year, credit two hours a term. Assistant Professor BRIGGS.

Open to candidates for the degree of Bachelor of Chemistry if they have taken course 50; to others only by special permission.

[55. **Theoretical Electrochemistry.** Throughout the year, credit three hours a term.] Not given in 1918-1919.

56a. **Applied Electrochemistry.** Throughout the year, credit two hours a term. Prerequisite course 50. Assistant Professor BRIGGS. It is advisable but not obligatory, to take 56b along with this course.

56b. **Applied Electrochemistry.** Throughout the year, credit two hours a term. Open to those who have had 50 and 51, and have taken or are taking 56a. Assistant Professor BRIGGS.

57. **Advanced Laboratory Practice.** Either term or throughout the year, credit up to six hours a term. Prerequisite courses determined in each case by the professor in charge. Assistant Professor BRIGGS and Mr. HOOD.

CHEMICAL MICROSCOPY

65. **Elementary Chemical Microscopy.** Repeated in second term, credit two hours. Prerequisite course 6 (or 7 and 12). Professor CHAMOT.

66. **Advanced Chemical Microscopy.** Second term, credit three or more hours. Prerequisite course 65. Professor CHAMOT.

SANITARY CHEMISTRY

69. **Elementary Sanitary Chemistry.** Throughout the year, credit five hours a term. Prerequisite course 6 (or 7 and 12) and course 32 (or 30, or 31). Professor CHAMOT and Mr. KENNEDY.

[70. **Special Topics in Food Examination.** First term, credit two hours. Prerequisite second term of course 69.] Not given in 1918-1919.

[72. **Microscopic Examination of Foods.** Second term, credit two or more hours. Prerequisite course 65. Professor CHAMOT.] Not given in 1918-1919.

[75. **Special Topics in Water Examination.** Second term, credit two hours. Prerequisite course 69. Professor CHAMOT.] Not given in 1918-1919.

78. **Advanced Sanitary Chemistry.** Throughout the year, credit two or more hours a term. Prerequisite course 69. Professor CHAMOT and Mr. KENNEDY.

[80. **Toxicology.** Second term, credit two hours. Prerequisite course 30. Professor CHAMOT.] Not given in 1918-1919.

AGRICULTURAL CHEMISTRY

83. **Agricultural Organic Chemistry.** First term, credit three hours. Prerequisite Chemistry 1. Professor CROSS.
84. **Agricultural Organic Chemistry, Laboratory Course.** First term, credit two hours. Prerequisite Chemistry 6. Designed to accompany course 83. Assistant Professor RICE.
85. **Agricultural Chemistry.** Second term, credit three hours. Prerequisite course 83. Professor CAVANAUGH.
- 85a. **Agricultural Chemistry, Laboratory Course.** Second term, credit two hours. Prerequisite course 84. Designed to accompany course 85. Assistant Professor RICE.
86. **Agricultural Chemistry, Advanced Course.** First term, credit three hours. Prerequisite course 85a. Professor CAVANAUGH.
87. **Agricultural Chemistry, Laboratory Course.** First term, credit three hours. Assistant Professor RICE. This course is designed to accompany course 86. Prerequisite course 85a.
88. **Agricultural Chemistry, Advanced Course.** Second term, credit three hours. Prerequisite course 85 or 92. Professor CROSS.
89. **Agricultural Chemistry, Laboratory Course.** Second term, credit three hours. Assistant Professor RICE. This course is designed to accompany course 88. Prerequisite courses 85a and 93.
90. **Advanced Agricultural Analysis.** Throughout the year, credit three or more hours a term. Prerequisite courses 87 and 89. Professor CROSS and Assistant Professor RICE.
91. **Agricultural Chemistry, Advanced Course.** Credit, two hours. Professor CAVANAUGH.
92. **Household Chemistry.** Second term, credit two hours. Prerequisite course 83. Professor CROSS.
93. **Household Chemistry, Laboratory Course.** Second term, credit two hours. Assistant Professor RICE. Designed to accompany course 92. Prerequisite chemistry 6 and 83.

SEMINARY

95. **Seminary.** Credit one hour. For seniors who are candidates for the degree of Bachelor of Chemistry.

RESEARCH

96. **Research for Undergraduate Students.** Throughout the year.
Seniors who are candidates for the degree of Bachelor of Chemistry are required to elect four hours a term in research under the direction of some member of the staff of instruction.

BOTANY

1. **Evolution of Plants.** First term, credit three hours. Professor ROWLEE and Mr. STORK.
2. **Elementary Plant Physiology and Ecology.** Second term, credit three hours. Professor ROWLEE and Mr. STORK.
3. **Local Flora.** Second term, credit three hours. Professor ROWLEE and Mr. DUNLAP.
- 4a. **Systematic Botany.** First term, credit three hours. Prerequisite courses 1 or 3. Professor ROWLEE and Mr. DUNLAP.
- 4b. **Systematic Botany.** Second term, credit three hours. Professor ROWLEE.
- 8a. **Plant Cytology.** First term, credit three hours. Prerequisite courses 1 and 2. Professor ROWLEE and Mr. DUNLAP.
- 8b. **Comparative Histology of Plants.** Second term, credit three hours. Prerequisite course 8a. Professor ROWLEE and Mr. DUNLAP.
- [9a. **Dendrology.** First term, credit four hours. Professor ROWLEE. Open to graduates.] Not given in 1918-1919.
- [9b. **Xylology.** Second term, credit four hours. Courses 8b and 9a may advantageously precede this course. Professor ROWLEE. Open to graduates.] Not given in 1918-1919.
10. **Comparative Morphology and Embryology.** Second term, credit three hours. Prerequisite courses 1 and 2 or 3. Mr. STORK. Open to graduates.
11. **Mycology.** First term, credit four hours. Prerequisite courses 1 and either 2 or 3. Mr. STORK. Open to graduates.
- [12. **Taxonomy of the Pteridophytes, Bryophytes, and Algæ.** Throughout the year, credit three hours a term. Open to graduates.] Not given in 1918-1919.
17. **Research Problems.** Professor ROWLEE, Mr. STORK, and Mr. DUNLAP.
18. **Seminary.** Credit one hour. Professor ROWLEE, Mr. STORK, and Mr. DUNLAP.

BIOLOGY

BIOLOGY, ENTOMOLOGY, LIMNOLOGY, AND NATURE STUDY

The following courses in the College of Agriculture are likewise considered as regular courses in the College of Arts and Sciences: 1, 1a, 2, 3, 4, 5, 10, 11, 12, 13, 14, 19, 20, 21, 29, 30, 31, 50, 59. See pages 120, 121.

ZOOLOGY

1. **General Zoology.** Throughout the year, credit three hours a term. Assistant Professor REED, Mr. SHADLE and assistants. Laboratory fee, \$3 a term.
- 1a. **Elements of Zoology.** Second term, credit three hours. Assistant Professor REED and Mr. SHADLE. For Veterinary students, only. Laboratory fee, \$3.
2. **Morphology of Invertebrates.** Throughout the year, credit three hours a term. Assistant Professor REED. Prerequisite course 1. Laboratory fee, \$3.50.
3. **Comparative Anatomy of Vertebrates.** Throughout the year, credit three hours a term. Assistant Professor REED and Mr. GAMBLE. Prerequisite course 1 or 5. Laboratory fee, \$3.50.
4. **Comparative Morphology and Phylogenesis of Vertebrates.** First term, credit three hours. Assistant Professor REED. Prerequisite course 1 or 5, embryology (may accompany or precede), and any one of the following: course 3, 12, or medical human anatomy.
5. **Systematic Vertebrate Zoology and Ecology.** Throughout the year, credit three hours a term. Assistant Professor WRIGHT.
6. **Field Ornithology.** Second term, credit three hours. Assistant Professor ALLEN and Mr. EMERSON. Laboratory fee, \$2.
- [7. **Ichthyology. Advanced Systematic and Field Zoology.** Second term, credit three hours. Assistant Professor WRIGHT.] Not given in 1918-1919.
8. **Herpetology.** Second term, credit three hours. Assistant Professor WRIGHT.
- [9. **Advanced Ornithology.** First term, credit three hours. Assistant Professor ALLEN. Given in alternate years with course 11.] Not given in 1918-1919.
- [10. **Mammalogy.** First term, credit three hours. Assistant Professor WRIGHT.] Not given in 1918-1919.
11. **Economic Ornithology and Mammalogy.** First term, credit three hours. Should be preceded by Zoology 5; presupposes an elementary knowledge of botany and entomology. Assistant Professor ALLEN and Mr. EMERSON. Laboratory fee, \$2.
12. **Mammalian Anatomy.** Second term, credit three hours. Assistant Professor REED and Mr. GAMBLE. Laboratory fee, \$3.
13. **Advanced Work and Research.** Throughout the year.
14. **Seminary in Systematic Vertebrate Zoology.** Throughout the year, credit one hour a term. Assistant Professor WRIGHT.

PHYSIOLOGY AND BIOCHEMISTRY

3. **Elementary Human Physiology.** Repeated in second term, credit three hours. Professor SIMPSON and assistants.
6. **Laboratory Work in Physiology.** Repeated in second term, credit two or more hours. Professor SIMPSON and assistants. May be taken after or along with course 3.
7. **Seminary.** Second term, credit one hour.
8. **Advanced Work and Research in Physiology.** Throughout the year. Professor SIMPSON and assistants. In connection with this course a weekly or fortnightly seminary is held.
9. **Hæmatology.** First term, credit two hours. Prerequisite Human Physiology 3. Mr. BURLAGE.
14. **Elementary Biochemistry.** First term, credit three hours. Prerequisite chemistry 32 or the equivalent. Assistant Professor SUMNER and Mr. BODANSKY.
(Courses 14 and 14a will not be accepted for the requirements of biochemistry in the medical college.)
- 14a. **Laboratory Work in Biochemistry.** First term, credit two hours. Open to those who are taking or have taken course 14. Assistant Professor SUMNER and Mr. BODANSKY.
16. **Advanced Biochemistry Lectures.** Throughout the year, credit one hour a term. Assistant Professor SUMNER, Mr. BODANSKY.
17. **Special Chapters in Biochemistry.** First term, credit two hours. Assistant Professor SUMNER, Mr. BODANSKY.
18. **Biochemistry for Medical Students.** Second term, credit two hours. Prerequisite chemistry 32 or its equivalent. Assistant Professor SUMNER and Mr. BODANSKY.
- 18a. **Laboratory Work in Biochemistry.** Second term, credit three hours. Prerequisite chemistry 32. Assistant Professor SUMNER and Mr. BODANSKY.
20. **Advanced and Research Work in Biochemistry.** Throughout the year. Assistant Professor SUMNER.

ANATOMY

21. **Elementary Human Anatomy.** First term, credit three hours. Professor KERR and Mr. ———.
22. **Anatomical Methods.** First term, credit three hours. Prerequisite Zoology 1. Previous work in comparative anatomy is also recommended. Professor KERR and instructors.
23. **Physiological Anatomy of the Muscular System.** For students of Physical Education. First term, credit three hours. Professor KERR and Mr. ———.
For those preparing to teach physical training. Should be preceded by Biology 1, or Zoology 1 and preceded or accompanied by Physiology 3 and Anatomy 21.

HISTOLOGY AND EMBRYOLOGY

1. **The Tissues: Histology and Histogenesis.** First term, credit four hours. No prerequisite, but previous work in biology (zoology and botany) or physiology is recommended. Professor KINGSBURY and assistants.
2. **The Organs: Histology and Development.** Second term, credit four hours. Prerequisite course 1 or the equivalent. Professor KINGSBURY and assistants. A continuation of course 1.
3. **Special Histology and Technique.** First term, credit two hours. Prerequisite courses 1 and 2, or 1 and 4, or the equivalent.
4. **Embryology of Vertebrates.** Second term, credit four hours. Prerequisite course 1 or the equivalent. Professor KINGSBURY and assistant.
5. **The Nervous System and Organs of Special Sense: Histology and Development.** Second term, credit two hours. Prerequisite course 1 or the equivalent. Professor KINGSBURY and assistant.
7. **Advanced Histology and Embryology.** Throughout the year, credit three or more hours a term. Prerequisite courses 1, 2, 3, or the equivalent. Professor KINGSBURY and assistant.
8. **Seminary.** Throughout the year, credit one hour a term. Prerequisite courses 1 and 2, or 4; may be taken with course 3 or 7.

GEOLOGY

GENERAL GEOLOGY

1. **Elementary Geology.** Repeated in second term, credit three hours. Professor RIES and Mr. ELSTON.

PHYSICAL GEOGRAPHY

2. **Elementary Physical Geography.** Throughout the year, credit three hours a term. Assistant Professor VON ENGELN and Mr. ELSTON.
 3. **Geography of North America.** Throughout the year, credit two hours a term. Prerequisite an elementary knowledge of physical geography, preferably course 2. Assistant Professor VON ENGELN.
 5. **Glaciers and Glaciation.** Second term, credit three hours. Prerequisite course 2 or, with permission, course 1. Assistant Professor VON ENGELN and Mr. ELSTON.
 6. **Commercial Geography.** First term, credit two hours. Assistant Professor VON ENGELN.
 8. **Advanced Physiography, Experimental and Research Work.** Throughout the year. Assistant Professor VON ENGELN and Mr. ELSTON. Credit, variable.
 9. **Seminary.** Throughout the year, credit two hours a term. For upperclassmen and graduate students with requisite preparation. Assistant Professor VON ENGELN.
- Meteorology and Climatology.** See Announcement of the College of Agriculture.

MINERALOGY AND PETROGRAPHY

11. **Elementary Mineralogy.** Repeated in second term, credit three hours; if taken after course 12, credit two hours. Prerequisite Chemistry 1. Professor GILL and assistant.
12. **Crystallography.** Repeated in second term, credit three hours; if taken after course 11, credit two hours. Prerequisite Chemistry 6 or 7, and Physics 1. Professor GILL and assistant.
13. **Mineralogy.** Second term, credit three hours; if taken after course 11, credit two hours. Prerequisite course 12. Professor GILL.
14. **Blowpipe Determination of Minerals.** First term, credit one hour. Prerequisite course 11 or 13 and Chemistry 6 or 7. Professor GILL and assistant.
15. **General Lithology.** Second term, credit one hour. Prerequisite courses 1 and 11. Professor GILL.
16. **Crystal Measurement and Drawing.** Second term, credit two hours. Prerequisite course 12. Professor GILL. Course 16 should be taken by students who intend to continue in course 17 or in course 20.
17. **Optical Determination of Minerals.** First term, credit three hours. Prerequisite course 13. Professor GILL.
18. **Petrography.** Second term, credit three hours. Prerequisite course 17. Professor GILL.
19. **Seminary in Mineralogy and Crystallography.** Throughout the year, credit one hour a term. Prerequisite courses 12, 13, 17. Professor GILL.
20. **Advanced or Special Work in Mineralogy and Petrography.** Throughout the year. Prerequisite courses dependent on nature of work. Professor GILL.

PALEONTOLOGY AND STRATIGRAPHIC GEOLOGY

21. **Historic Geology.** Second term, credit three hours. Prerequisite course 1 or its equivalent. A course in invertebrate zoology is also desirable. Professor HARRIS.
22. **General Stratigraphic Geology.** Throughout the year, credit three hours a term. Prerequisite courses 1 and 21 or their equivalent. Professor HARRIS.
23. **Geologic Surveying.** First term, credit two hours. Prerequisite Geology 1 and 21, or their equivalent, and spherical trigonometry. Professor HARRIS.

24. **Invertebrate Paleontology.** Credit two hours each term. Prerequisite a three-hour course in biology. Professor HARRIS.

25. **Paleontology and Stratigraphic Geology and Research.** Course I and Biology I or their equivalent must be taken before or with this work. Professor HARRIS.

ECONOMIC GEOLOGY

30. **Building Stones and Clay Products.** First term, credit two hours. Professor RIES and assistant.

31. **Engineering Geology.** Throughout the year, credit three hours a term. Professor RIES and Assistant Professor SOMERS.

32. **General Economic Geology.** Throughout the year, credit three hours a term. For first term, prerequisite course I or equivalent; second term, prerequisite courses I and II, or their equivalent. Professor RIES and Assistant Professor SOMERS.

33. **Geologic Examination of Mineral Deposits.** Second term, credit two hours. Prerequisite course 31 or 32. Assistant Professor SOMERS.

34. **Mining of Mineral Deposits.** Two or three hours a term as the student desires to elect. Assistant Professor SOMERS.

35. **Clay Investigation.** Prerequisite courses Geology I or 31 and Chemistry I or its equivalent. Professor RIES.

36. **Advanced or Special Work in Economic Geology.** Throughout the year. Prerequisite courses dependent on the nature of the work. Professor RIES and Assistant Professor SOMERS.

38. **Geology of Petroleum and Natural Gas.** First term, credit three hours. Prerequisite course 31, or the first term of 32. Assistant Professor SOMERS.

39. **Field Work in Mining Geology.** Credit three hours. Professor RIES and Assistant Professor SOMERS. Required of students of mining engineering.

MILITARY SCIENCE AND TACTICS

1. **Practical and Theoretical Military Training.** Throughout the year. Every male student, a candidate for a baccalaureate degree, who is required to take five, six, seven, eight or more terms in residence, must take, in addition to the scholastic requirements for the degree, one, two, three, or four terms respectively in the Department of Military Science and Tactics. See page 164.

2. **Elective Military Training.** Throughout the year, credit two hours a term. Prerequisite course I, or its equivalent.

PHYSICAL EDUCATION

In preparation for the courses described below, students should take in the first two years, Chemistry I, Physics 2, Biology I or Botany, Zoology I or 5, Physiology 3 and Anatomy 21. Students intending to follow Physical Education as a profession, or who wish to meet the New York State requirements for teachers in physical training, should consult the department.

20. **Principles of Physical Education.** For juniors. Throughout the year, credit two, three, or four hours a term. (No credit will be given for practice work alone). Professor YOUNG and Miss ATKINSON.

21. **Hygiene, Personal and Public.** Repeated in second term, credit two hours. Professor YOUNG and Dr. MATZKE.

22. **Physical Inspection.** For juniors and seniors. Second term, credit two hours.

23. **Physiological Anatomy of the Muscular System.** For juniors and seniors. First term, credit three hours. Professor KERR and Mr. ———.

25. **Principles of Physical Education.** For seniors. Throughout the year, credit two, three, or four hours a term. (No credit given for practice alone.) Professor YOUNG and Miss ATKINSON.

PHYSICAL TRAINING FOR MEN

1. **For Freshmen Excused from Drill.** Throughout the year, three periods a week.

2. **For Sophomores Excused from Drill.** Throughout the year, three periods a week.

3. **Boxing and Wrestling.** Elective.

PHYSICAL TRAINING FOR WOMEN

4. **For Freshmen.** Throughout the year, three periods a week. Miss CANFIELD.

5. **For Sophomores.** Throughout the year, three periods a week. Miss ATKINSON.

COLLEGE OF LAW

For detailed information concerning the work of the College of Law, candidates for admission to that college should consult the Announcement of the College of Law which will be sent gratis on application to the Secretary of the University.

FACULTY OF THE COLLEGE OF LAW

JACOB GOULD SCHURMAN, A.M., D.Sc., LL.D., President of the University.
EDWIN HAMLIN WOODRUFF, LL.B., Dean of the Faculty and Professor of Law.
CHARLES TRACEY STAGG, LL.B., Professor of Law and Secretary of the College.
CHARLES KELLOGG BURDICK, A.B., LL.B., Professor of Law.
GEORGE GLEASON BOGERT, A.B., LL.B., Professor of Law. (Absent on leave.)
OLIVER LEROY MCCASKILL, Ph.B., J.D., Professor of Procedure.
HENRY WHITE EDGERTON, A.B., LL.B., Assistant Professor of Law. (Absent on leave.)
CHARLES SAGER COLLIER, A.B., LL.B., Lecturer on Law.

WILLIAM MACOMBER, A.B., (of the Buffalo Bar, author of "The Fixed Law of Patents"), Lecturer on the Patent Laws of the United States.
JAMES WHITE PERSONS, LL.B., (Referee in Bankruptcy, Buffalo), Lecturer on the United States Bankruptcy Act.
JUDGE HARRINGTON PUTNAM, A.B., LL.D., (Justice of the New York Supreme Court, Brooklyn), Lecturer on the Law of Shipping and Admiralty.
LUCIUS WARD BANNISTER, A.B., LL.B., (of the Denver, Colo., Bar) Lecturer on Western Water Rights.

EDWARD ECKER WILLEVER, Librarian.

THE DEGREE OF BACHELOR OF LAWS

The undergraduate instruction for students in the College of Law leads to the degree LL.B., the requirement for which is the completion of one of the following curricula.

1. The curriculum of four years,* for students who have only the preparation afforded by high schools and preparatory schools.
2. The curriculum of three years, designed for college graduates or for those who have completed at least one year (beginning in 1919, two years) of college work.
3. The curriculum of six years, leading to the degree of A.B. and LL.B.

Candidates for a degree in the four-year course must take during the first two years three hours of physical training a week: the first year in the Department of Military Science and Tactics and the second year either in that department or in the Department of Physical Culture as they may elect. Candidates for a degree in the three-year course must take during their first year three hours a week of physical training and may elect to take it in either department. Women take all their physical training work in the Department of Physical Culture. Drill and physical training are not required of college graduates.

For admission to the College of Law, see page 37; for tuition in the College of Law, see page 44.

*In September, 1919, and thereafter, applicants will not be admitted to the four-year course.

Admission to Advanced Standing

Any person who, being entitled to enter the first year of the three-year law course, has been in regular attendance for at least one academic year of not less than eight months at another law school having a three-year course for its degree, will be admitted to the junior class, upon passing the examinations in the studies of the first year of the three-year law course. The work of the junior and senior years must be pursued in actual residence.

Admission as Special Students

Applicants who are twenty-one years of age, may in the discretion of the Faculty, be admitted to the College as special students not candidates for a degree, provided they present the New York Regents' Law Student Certificate or a substantial equivalent. This privilege will be granted only upon written application specifying the age of the applicant and the amount of preparatory study or of previous law study, and accompanied, if practicable, with certificates from the preparatory school, law school, or attorney under whose direction such studies have been pursued. New York students will not be admitted as special students unless they present a Regents' Law Student Certificate. Applicants are advised to correspond with the Dean of the College before presenting themselves in person. Special students may be admitted as candidates for a degree if they satisfy the entrance requirements before the beginning of their second year in the College.

Admission of Students from Other Colleges of the University

Subject to the regulations of the college in which he is registered, and of the College of Law, a student from another college of the University may elect work in the College of Law; but he is not permitted to do so before the beginning of his junior year, except upon presentation of special reasons to the Dean of the Law Faculty. Work permitted to be taken in the College of Law may be counted towards the law degree.

For the admission of seniors from the College of Arts and Sciences, see page 90.

CURRICULUM OF FOUR YEARS

First or Freshman Year

- 2. **Torts (including Master and Servant).** Three hours. Assistant Professor EDGERTON.
- Elementary Economics.** (Political Science 51). Three hours. Professor DAVENPORT.
- English History to 1509.** (History 31). First term, three hours. Assistant Professor SWEET.
- English Constitutional History to the Sixteenth Century.** (History 33). Second term, three hours. Prerequisite, History 31. Assistant Professor SWEET.
- Electives.** Subjects in the College of Arts and Sciences. Six or seven hours each term. All electives are subject to the approval of the Dean of the College of Law.

Second or Sophomore Year

- 1a. **Contract.** Four hours until the middle of the second term. Professor WOODRUFF.
- [Courses 1a and 1b constitute a continuous course and registration must be for the entire year.]
- 1b. **Agency.** Four hours from the middle of the second term. Professor WOODRUFF.
- 3. **Criminal Law and Procedure.** First term, four hours. Professor BURDICK.
- 4. **Property I.** First term, two hours; second term, four hours. Professor BURDICK.
- 5. **Common Law Pleading.** Second term, four hours. Professor MCCASKILL.
- 6. **Brief Making.** First term, one hour. Professor STAGG.
- Electives.** Subjects in Arts and Sciences. First term, four to six hours; second term, three to six hours. All electives are subject to the approval of the Dean of the College of Law.

Third or Junior Year

- [20. **Property II.** Second term, one hour. Professor BOGERT.] Not to be given in 1918-1919.
- [20a. **Sales.** Second term, three hours. Professor BURDICK.] To be given to juniors and seniors together in 1918-1919.
- 21. **Negotiable Paper.** First term, two hours. Professor STAGG.
- 22. **Probate Law.** Second term, three hours. Professor STAGG.
- 23. **Equity Jurisdiction.** First term, three hours; second term, two hours. Assistant Professor EDGERTON.
- 24. **Insurance.** Second term, two hours. Professor WOODRUFF.
- 25. **Domestic Relations and the Law of Persons.** First term, two hours. Professor WOODRUFF.
- 26. **Evidence.** First term, four hours. Professor MCCASKILL.
- 28. **Code Pleading.** First term, three hours. Professor MCCASKILL.

29. **Civil Procedure.** Second term, two hours. Professor STAGG.
Electives. Required in the second term, two or three hours in Arts and Sciences, subjects to be approved by the Dean.

Fourth or Senior Year

30. **Mortgages.** First term, two hours. Professor STAGG.
 [31. **Suretyship.** First term, two hours. Professor BURDICK.] Not to be given in 1918-1919.
 32. **Law of Associations (Partnership and Private Corporations.)** Two hours. Assistant Professor EDGERTON.
 33. **Quasi-Contracts.** First term, two hours. Professor WOODRUFF.
 34. **Law of Public Service and Carriers.** First term, three hours. Professor BURDICK.
 35. **Practice Court.** Second term. Four hours. Professor MCCASKILL.
 [36. **Constitutional Law.** Second term, three hours. Professor BURDICK.] Given to juniors and seniors together in 1917-1918. Not to be given in 1918-1919.
 37. **Civil Procedure.** First term, three hours. Professor STAGG.
 38. **Property III.** First term, one hour. Professor MCCASKILL..
 38a. **Trusts.** Second term, one hour. Assistant Professor EDGERTON.
 40. **Public Officers and Municipal Corporations.** Second term, three hours. Professor STAGG.
 20a. **Sales.** Second term, three hours. Professor BURDICK. To be given to juniors and seniors together in 1918-1919.

THE CURRICULUM OF THREE YEARS

First Year. 1a. Contract; 1b. Agency; 2. Torts; 3. Criminal Law and Procedure; 4. Property I; 5. Common Law Pleading; 6. Brief Making.
Second or Junior Year. Same as Third Year of the Four-Year Curriculum.
Third or Senior Year. Same as Fourth Year of the Four-Year Curriculum.

THE CURRICULUM OF SIX YEARS IN ARTS AND SCIENCES AND LAW

Under the regulations of the College of Arts and Sciences a qualified senior may take all his work in the College of Law, receiving the degree of A.B. at the end of the year, and at the same time completing the work of the first year of the three-year law course in the College of Law; by two additional years of residence in the College of Law, he will be able to satisfy the requirements for the degree LL.B.

PRACTICE DEPARTMENT

The curriculum of the College of Law is not confined to instruction in the principles of substantive law and of pleading and evidence. As far as possible the student is trained to apply these principles to the more common problems met with in practice. In the first year the student receives instruction in legal bibliography, the use of authorities, the actual finding and collating of authorities, and the preparation of briefs upon elementary subjects. This is given in the class-room and by library practice. He is also instructed in the organization and jurisdiction of courts, state and federal, and the commencement of actions. An extended course in New York practice is given, and in it are pointed out the principles common to all jurisdictions. A course is also given in the practice of probate courts, and in the last term of the senior year a practical course in conveyancing.

CORNELL LAW QUARTERLY

This legal periodical, published by the Faculty and an Editorial Board of students of the College of Law, was established in 1915, and is issued in November, January, March, and May. The preparation by students of notes on recent cases for publication in the Quarterly affords valuable training in legal research and editorial work under the supervision of members of the Faculty.

SPECIAL COURSES OF LECTURES BEFORE THE COLLEGE OF LAW

ATTENDANCE REQUIRED OF JUNIORS AND SENIORS

The Federal Bankruptcy Act. Ten lectures. Mr. PERSONS.
Western Water Rights and Irrigation Law. Ten lectures. Mr. BANNISTER.
The Patent Laws of the United States. Six lectures. Mr. MACOMBER.
The Law of Shipping and Admiralty. Six lectures. Judge PUTNAM. Each of the above courses is given in alternate years.

OTHER LECTURES

Provision is also made for single lectures to be given from time to time upon topics of immediate legal interest. The Frank Irvine lectureship, established in 1913 by the Conkling Chapter of Phi Delta Phi, provides for one or more lectures each year. In 1917-1918 the incumbent was Hon. Charles M. Hough, Judge of the U. S. Circuit Court of Appeals, New York City. Many lectures by non-residents are also given each year under the auspices of the University or some of its other colleges and are frequently of particular interest and value to students in the College of Law.

ELECTIVES IN THE COLLEGE OF ARTS AND SCIENCES

In addition to the courses that law students are required to take in the College of Arts and Sciences in their first year of the four-year curriculum, all other courses in the College of Arts and Sciences are open to law students, subject to the regulations of the College of Arts and Sciences and to the prior demands of the regular schedule of professional courses in the College of Law.

EXAMINATION AND CLASS STANDING

Examinations are held at the end of the term in the work of that term, and in September for the removal of conditions. The following grades are given upon examinations; A, excellent, B, good; C, fair; D, poor; Cond., failure to pass. AA may be given for a paper of exceptional excellence. A student failing for the first time to maintain the standard required for remaining in the college may be permitted, in the discretion of the faculty, to return the following year and repeat the entire work of the term during which the failure occurred; but a student who fails the second time will be permanently dropped. Detailed provisions with respect to examinations and class standing are stated in the Rules for the Guidance of Law Students issued on Registration Day of the first term.

For the Library of the College of Law, see page 154.

Certificate of Attendance. Each student who has been in regular attendance upon the College, whether entitled to a degree or not, may, on application to the Faculty, receive an official certificate of attendance, which states the time of his attendance, and, if desired, the measure of his attainments. The certificate of a year's satisfactory attendance required by the New York Bar examiners, implies not only regular attendance upon, but also the successful completion of the prescribed course of instruction for a full year (not less than ten hours a week). Students in the four-year course will therefore receive no time certificate for the first year, but will after regular attendance and on the successful completion of that course receive a time certificate for three years.

SCHOLARSHIPS AND PRIZES

The **Boardman Senior Law Scholarship** and the **Fraser Scholarships** are awarded only to students in the College of Law. For these and for the various scholarships and prizes that are open to all students in Cornell University see pages 155-161.

THE MEDICAL COLLEGE

For detailed information concerning the work of the Medical College, candidates for admission to that college should consult the Announcement of the Medical College which will be sent gratis on application to the Secretary of Cornell Medical College, 477 First Avenue, New York City.

FACULTY OF MEDICINE IN NEW YORK CITY

JACOB GOULD SCHURMAN, A.M., D.Sc., LL.D., President of the University.
WALTER L. NILES, M.D., Acting Dean and Assistant Professor of Medicine.
JEREMIAH S. FERGUSON, M.S., M.D., Secretary of the Faculty.
FREDERIC S. DENNIS, A.B., M.D., F.R.C.S., Emeritus Professor of Clinical Surgery.
NEWTON M. SHAFFER, M.D., Emeritus Professor of Orthopædic Surgery.
W. GILMAN THOMPSON, Ph.B., M.D., Emeritus Professor of Medicine.
GEORGE WOOLSEY, A.B., M.D., Professor of Clinical Surgery.
J. CLIFTON EDGAR, Ph.B., A.M., M.D., Professor of Obstetrics and Clinical Midwifery.
JAMES EWING, A.M., Sc.D., M.D., Professor of Pathology.
GRAHAM LUSK, Ph.D., Sc.D., F.R.S. (Edin.) Professor of Physiology.
FRANK SHERMAN MEARA, A.B., Ph.D., M.D., Professor of Therapeutics.
ROBERT ANTHONY HATCHER, Ph.G., M.D., Professor of Pharmacology.
CHARLES R. STOCKARD, M.S., Ph.D., Professor of Anatomy.
LEWIS A. CONNER, Ph.B., M.D., Professor of Medicine.
WILLIAM J. ELSER, M.D., Professor of Bacteriology.
STANLEY R. BENEDICT, Ph.D., Professor of Chemistry.
CHARLES L. GIBSON, A.B., M.D., Professor of Surgery.
JOHN A. HARTWELL, Ph.B., M.D., Associate Professor of Surgery and Professor of Clinical Surgery.
JOSEPH E. WINTERS, M.D., Professor of Clinical Medicine, Department of Pediatrics.
CHARLES L. DANA, A.M., M.D., LL.D., Professor of Clinical Medicine, Department of Neurology.
GEORGE THOMSON ELLIOT, A.B., M.D., Professor of Clinical Medicine, Department of Dermatology.
FREDERICK WHITING, A.M., M.D., Professor of Clinical Surgery, Department of Otology.
EDWARD L. KEYES, jr., A.B., Ph.D., M.D., Professor of Clinical Surgery, Department of Urology.
ROBERT G. REESE, Ph.G., M.D., Professor of Clinical Surgery, Department of Ophthalmology.
OTTO H. SCHULTZE, A.M., M.D., Professor of Medical Jurisprudence.
ALFRED S. TAYLOR, M.D., Professor of Clinical Surgery.
HOMER F. SWIFT, M.D., Associate Professor of Medicine.
WILLIAM C. THRO, A.M., M.D., Professor of Clinical Pathology.
GEORGE G. WARD, jr., M.D., Associate Professor of Clinical Surgery, Department of Gynecology.
ALEXANDER LAMBERT, A.B., Ph.B., M.D., Professor of Clinical Medicine.
CHARLES E. NAMMACK, Ph.B., M.D., LL.D., Professor of Clinical Medicine.
IRVING S. HAYNES, Ph.B., M.D., Professor of Clinical Surgery.
WILLIAM B. COLEY, A.B., A.M., M.D., Professor of Clinical Surgery.
JOHN ROGERS, A.B., Ph.D., M.D., Professor of Clinical Surgery.
HARMON SMITH, A.B., M.D., Professor of Clinical Surgery, Department of Laryngology and Rhinology.
BURTON T. LEE, A.B., M.D., Professor of Clinical Surgery.
CHARLTON WALLACE, M.D., Professor of Clinical Surgery, Department of Orthopædic Surgery.
HOWARD LILIENTHAL, M.D., Professor of Clinical Surgery.
LEWIS G. COLE, M.D., Professor of Roentgenology.
JOHN C. TORREY, A.B., Ph.D., Professor of Hygiene.

- GEORGE H. KIRBY, B.S., M.D., Professor of Clinical Medicine, Department of Psychiatry.
- FOSTER KENNEDY, M.D., Associate Professor of Clinical Medicine, Department of Neurology.
- EUGENE F. DuBOIS, M.D., Assistant Professor of Medicine.
- JAMES MORLEY HITZROT, A.B., M.D., Assistant Professor of Clinical Surgery, Department of Surgery.
- J. F. GUDERNATSCH, Ph.D., Assistant Professor of Anatomy.
- WILLIAM H. SHELDON, M.D., Assistant Professor of Clinical Medicine, Department of Medicine.
- MALCOLM GOODRIDGE, M.D., Assistant Professor of Therapeutics.
- PERCY R. TURNURE, A.M., M.D., Assistant Professor of Clinical Surgery.
- CHARLES NORRIS, M.D., Assistant Professor of Pathological Anatomy.
- HORACE W. FRINK, M.D., Assistant Professor of Neurology.
- JOSEPH P. HOGUET, M.D., Assistant Professor of Clinical Surgery.
- CARY EGGLESTON, M.D., Assistant Professor of Pharmacology.
- HAROLD C. BAILEY, M.D., Instructor in Obstetrics.
- DAVID P. BARR, A.B., M.D., Instructor in Medicine.
- BENJAMIN S. BARRINGER, A.B., M.D., Instructor in Clinical Surgery, Department of Urology.
- DAVID N. BARROWS, A.B., M.D., Instructor in Clinical Surgery, Department of Gynecology.
- WILLIAM NATHANIEL BERKELEY, M.D., Director of the Laboratory of Experimental Medicine.
- CHARLES G. BRINK, A.B., M.D., Instructor in Clinical Medicine.
- KENNETH BULKLEY, M.D., Instructor in Clinical Surgery.
- WALTER H. BRUNDAGE, M.D., Instructor in Medicine.
- REGINALD BURBANK, A.B., M.D., Instructor in Clinical Pathology.
- ETHAN F. BUTLER, M.D., Instructor in Military Surgery.
- RUSSELL L. CECIL, M.D., Instructor in Medicine and Assistant in Clinical Pathology.
- ROBERT CHAMBERS, A.M., Ph.D., Instructor in Anatomy.
- ARTHUR F. COCA, M.D., Instructor in Immunology.
- PHEBE L. DuBOIS, M.D., Instructor in Clinical Medicine.
- D. T. EDWARDS, Ph.D., Instructor in Physiology.
- ELSIE S. L'ESPERANCE, M.D., Instructor in Pathology.
- LILLIAN K. P. FARRAR, A.B., M.D., Instructor in Clinical Surgery, Department of Gynecology.
- JAMES BELDEN GERE, M.D., Instructor in Neuro-Pathology.
- JOHN C. A. GERSTER, M.D., Instructor in Surgery.
- RALPH EUGENE HERENDEN, M.D., Instructor in Roentgenology.
- ARTHUR L. HOLLAND, M.D., Instructor in Medicine.
- HENRY WIRT JACKSON, M.D., Instructor in Clinical Pathology.
- NANCY JENISON, M.D., Instructor in Medicine.
- JAMES H. KENYON, B.S., M.D., Instructor in Chemical Surgery.
- JOHN F. McGRATH, M.D., Instructor in Clinical Surgery, Department of Gynecology.
- EDWARD MILTIMORE, M.D., Instructor in Medicine.
- CHARLES V. MORRILL, A.M., Ph.D., Instructor in Anatomy.
- HUGH ELLIS MORROW, B.S., Instructor in Chemistry.
- JOHN A. NUTTER, M.D., Instructor in Clinical Surgery, Department of Orthopedic Surgery.
- E. OSTERBERG, Instructor in Chemistry.
- S. DOUGLAS PALMER, A.B., M.D., Assistant in Anatomy.
- GEORGE PAPANICOLAU, Ph.D., M.D., Instructor in Anatomy.
- HAROLD E. PARDEE, M.D., Instructor in Medicine.
- HENRY H. PELTON, M.D., Instructor in Medicine.
- ALFRED RAHE, Instructor in Hygiene.
- JOHN H. RICHARDS, M.D., Instructor in Clinical Pathology and in Medicine.

JOSEPH C. ROPER, M.D., Instructor in Clinical Medicine, Department of Pediatrics.
 HAROLD E. SANTEE, A.B., M.D., Instructor in Operative Surgery and Assistant in Clinical Surgery.
 HANS J. SCHWARTZ, M.D., Instructor in Clinical Pathology and Clinical Instructor in Medicine, Department of Dermatology.
 MONTGOMERY H. SICARD, B.S., M.D., Instructor in Therapeutics.
 WILLIAM L. SNEED, M.D., Instructor in Applied Anatomy.
 HARRY VAN NESS SPAULDING, M.D., Instructor in Operative Surgery.
 RALPH G. STILLMAN, M.D., Instructor in Clinical Medicine.
 LAURENCE W. STRONG, M.D., Instructor in Gynecological Pathology.
 TIMOTHY F. SULLIVAN, M.D., Instructor in Military Surgery.
 BENJAMIN MORGAN VANCE, A.B., M.D., Instructor in Surgical Pathology.
 GEORGE W. WHEELER, M.D., Instructor in Bacteriology.
 HARVEY C. WILLIAMSON, M.D., Instructor in Obstetrics.
 JAMES WORCESTER, M.D., Instructor in Clinical Surgery.

Clinical Instructors

C. O. CHENEY, M.D., Clinical Instructor in Medicine, Department of Psychiatry.
 ARTHUR H. CILLEY, M.D., Clinical Instructor in Surgery, Department of Orthopedic Surgery.
 ARTHUR E. HOAG, M.D., Clinical Instructor in Surgery, Department of Surgery.
 HOWARD S. JECK, Ph.B., M.D., Clinical Instructor in Surgery, Department of Urology.
 MIGUEL LAVANDERA, M.D., Clinical Instructor in Surgery, Department of Urology.
 GEORGE B. MCAULIFFE, A.B., M.D., Clinical Instructor in Surgery, Department of Otolaryngology.
 WALTER C. MONTGOMERY, M.D., Clinical Instructor in Surgery, Department of Laryngology and Rhinology.
 CHARLES HALPIN NAMMACK, A.B., M.D., Clinical Instructor in Medicine.
 CLARENCE P. OBENDORF, M.D., Clinical Instructor in Medicine, Department of Neurology.
 B. SAMUELS, M.D., Clinical Instructor in Surgery, Department of Ophthalmology.
 WILLIAM L. SOULE, A.B., M.D., Clinical Instructor in Anæsthesia.
 FREDERICK W. STECHMANN, M.D., Clinical Instructor in Medicine, Department of Neurology.
 RICHMOND STEPHENS, M.D., Clinical Instructor in Surgery, Department of Orthopedic Surgery.
 J. W. STEPHENSON, M.D., Clinical Instructor in Medicine, Department of Neurology.
 WILLIAM D. TYRRELL, M.D., Clinical Instructor in Medicine, Department of Pediatrics.
 GEORGE W. VANDEGRIFT, A.M., M.D., Clinical Instructor in Surgery, Department of Ophthalmology.
 LUCIUS A. WING, B.S., M.D., Clinical Instructor in Surgery, Department of Surgery.
 MAY G. WILSON, M.D., Clinical Instructor in Medicine, Department of Pediatrics.

Assistants

EDWARD MCPHERSON ARMSTRONG, M.D., Clinical Surgery.
 RUTH RAND ATTERBURY, A.B., Assistant in Anatomy.
 RICHARD W. BOLLING, M.D., Clinical Surgery.
 JACK V. BOHRER, B.S., M.D., Clinical Surgery.
 CHARLES S. B. CASSASSA, A.B., M.D., Pathological Anatomy.
 SUMNER EVERINGHAM, A.B., Clinical Surgery.
 GUILFORD S. DUDLEY, A.B., M.D., Clinical Surgery.
 HELEN GAVIN, M.A., Assistant in Chemistry.

HENRY MULLER, A.B., M.D., Pathology.

THOMAS A. MULCAHY, M.D., Clinical Assistant in Surgery, Department of Otology.

S. DOUGLAS PALMER, A.B., M.D., Anatomy.

JOSEPHINE B. NEAL, A.B., M.D., Medicine.

M. E. VAN FLEET, M.D., Clinical Assistant in Medicine, Department of Neurology.

HARRIET D. WHITE, A.B., Chemistry.

H. MURAYAMA, Preparateur in Anatomy.

JOHN P. PETERS, M.D., Medicine.

EMILY J. SEAMON, M.D., Experimental Medicine.

Lecturers

MAX EINHORN, M.D., Lecturer on Diseases of the Stomach.

JOHN T. MACCURDY, M.D., Lecturer on Clinical Medicine, Department of Psychiatry.

A. I. RINGER, M.D., Lecturer on Physiology.

FACULTY OF MEDICINE AT ITHACA

JACOB GOULD SCHURMAN, A.M., D.Sc., LL.D., President of the University.

ABRAM T. KERR, B.S., M.D., Professor of Anatomy and Secretary of the Medical College at Ithaca.

SIMON HENRY GAGE, B.S., Emeritus Professor of Histology and Embryology.

WILLIAM RIDGELY ORNDORFF, A.B., Ph.D., Professor of Organic Chemistry.

BENJAMIN FREEMAN KINGSBURY, Ph.D., M.D., Professor of Histology and Embryology.

SUTHERLAND SIMPSON, D.Sc., M.D., F.R.S.E., Professor of Physiology.

JAMES BATCHELLER SUMNER, A.M., Ph.D., Assistant Professor of Biochemistry.

HUGH McMILLAN KINGERY, A.B., A.M., Instructor in Histology and Embryology.
(Absent on leave.)

JOSEPH ALMA DYE, A.B., Instructor in Physiology.

STANLEY ROSS BURLAGE, Instructor in Physiology.

AARON BODANSKY, Instructor in Biochemistry.

FRED WALDORF STEWART, Instructor in Anatomy.

WILLIAM PERRINE VAN WAGENEN, Assistant in Anatomy.

JENETTE EVANS, Assistant in Physiology.

CHRISTIANA SMITH, Assistant in Histology and Embryology.

THE MEDICAL COLLEGE

The Cornell Medical College was founded in 1898. It comprises two divisions, one of which is in New York City, the other in Ithaca. The work of the whole curriculum of four years is given in New York City; the work of only the first year is given in Ithaca. Men may take the first year of the curriculum in New York City or in Ithaca as they may elect; women are required to take the first year in Ithaca.

BUILDINGS, LABORATORIES, AND HOSPITAL FACILITIES

The main building of the Medical College in New York City, comprising the Medical School and Dispensary, is situated on First Avenue from 27th to 28th Streets.

The Loomis Laboratory, which serves the purpose of instruction in connection with the laboratories in the main building of the College, is organized as a research laboratory with special departments in bacteriology, physiological chemistry, experimental medicine, and pharmacology.

The College Dispensary, located in the main building, is intimately connected with the laboratory and research facilities of the College.

The New York Hospital. One-half of the medical, surgical, and pathological services of this hospital are assigned to the Medical College for the advancement of its teaching and research.

The Bellevue Hospital. The second of the four divisions of this hospital is at the disposal of the faculty of the Medical College for medical instruction.

The Neurological Institute. By courtesy of the Institute, certain work is offered to third and fourth year students in the Medical College.

Manhattan State Hospital, Ward's Island. Through the courtesy of the authorities of this hospital, the Professor of Psychiatry in the Medical College is enabled to offer in its wards, clinical instruction.

Thanks to the generosity of Dr. James Douglas the Memorial Hospital has recently received a large endowment for the study, treatment, and research of cancer and allied diseases, on the condition that the said Hospital devote itself exclusively to such work and also on the further condition that the Council of the Cornell University Medical College shall name the medical and surgical staff of the Hospital (subject, however, to the approval of the Board of Managers of the Hospital) and shall also approve the five medical members of the said Board of Managers and nominate their successors as from time to time vacancies occur in these positions.

Stimson Hall, the building of the Ithaca Division of the Medical College, is situated on the campus, and is a part of the general group of University buildings.

ADMISSION TO THE MEDICAL COLLEGE

Applications for admission to the Medical College, are entertained from the following class of candidates:

1. Graduates of approved colleges or scientific schools.
2. Seniors in good standing in approved colleges or scientific schools upon condition that their faculty will permit them to substitute the first year in the Cornell University Medical College for the fourth year of their college course, and will confer upon them the bachelor's degree upon the satisfactory completion of the year's work.*

*No student under this clause is permitted to enter the second year of the Medical curriculum without the bachelor's degree obtained after at least three years of undergraduate work. This clause is intended to provide for those students who by specially directed or by specially proficient work accomplish the essential requirements for a B.S. or B.A. degree during three years of college residence.

3. Persons who give evidence by examinations that they have acquired an equivalent education to that signified by a bachelor's degree, and training sufficient to enable them to profit by the instruction offered in the Medical College.

All candidates for admission to the Cornell University Medical College must also present satisfactory courses in Physics, Chemistry, Biology, English, and a modern language.

ADMISSION TO ADVANCED STANDING

Applicants for advanced standing must have met in full the requirements for admission, and must have already attended the legally required number of courses in an approved regular medical college. Applicants thus qualified may be admitted to the Cornell University Medical College under the following conditions:

1. A properly attested certificate of actual attendance at a registered medical college for the full number of years of medical study for which time credit is asked must be presented and approved.

2. A certificate showing that the student has satisfactorily completed in an approved medical college all of the required work of the years for which credit is asked must be presented and approved.

3. Subject credit will be granted on presentation and approval, by the heads of departments, of properly attested certificates stating the courses already completed in an approved medical college with the number of hours, didactic and laboratory, devoted thereto, together with the name of the instructor.

4. In the absence of the approved certificate called for in the preceding paragraph, subject credit for advanced standing will be granted only by examination.

ADMISSION TO SPECIAL COURSES

Graduates in medicine, or students who desire to pursue courses without credit toward graduation, are admitted to registration as special students, after approval by the head of the department conducting the course. Such special courses do not count in any way as part of the four-year course required of candidates for the degree of Doctor in Medicine.

TUITION AND LABORATORY FEES

The tuition for regular students in the Medical College, in New York City and in Ithaca, is \$150 a year. Laboratory fees are \$35 a year for the first three years, and \$25 for the fourth year. There is a final examination fee of \$25. A registration fee of \$5 is required of all regular students.

Tuition for special students depends on the nature of the courses pursued. For details, the Secretary of the Medical College in New York City should be consulted. All special students must pay a registration fee of \$5.

The Academic Year. In the Medical College in New York City, the academic year is divided into three terms of eleven, ten, and eleven weeks respectively. In the Ithaca Division of the Medical College, the academic year consists of two terms of approximately equal length.

THE DEGREE OF DOCTOR OF MEDICINE

Instruction in the Medical College leads to the degree of Doctor of Medicine, the requirement for which is the completion of the following curriculum of four years.

First Year. Major subjects: anatomy, physiology, organic chemistry (including laboratory work), histology and embryology. Minor subjects: neuro-anatomy, physiological chemistry.

Second Year. Major subjects: physiology, pharmacology. Minor subjects: medicine, surgery, obstetrics, bacteriology, anatomy, pathology, nutrition.

Third Year. Major subjects: pathology, obstetrics. Minor subjects: medicine, surgery, clinical pathology, pediatrics, neurology, pathological anatomy, urology, and applied anatomy, therapeutics, otology, ophthalmology, laryngology and rhinology, dermatology, psychiatry, and hygiene.

Fourth Year. Major subjects: medicine, surgery, therapeutics, gynecology, Minor subjects: neurology, orthopedics, pediatrics.

Major and Minor Courses. Major courses are those in which a student completes his work in a given department or subject. Minor courses comprise the shorter laboratory and recitation courses.

Conditions allowed at the end of the first, of the second, and of the third year of the curriculum: one major and one minor: or two minor subjects. All conditions must, however, be successfully passed before admission to the succeeding year. If at the end of the fourth year any student fails to pass in not more than one major, or in two minor subjects, a re-examination in these subjects may be allowed within two weeks, and if the candidate is then successful the degree may be conferred. If the candidate fails to pass in any subject at this second examination, the work of the fourth year must be repeated. Before being readmitted to the fourth year the candidate may be required to pass a satisfactory examination in anatomy, physiology, chemistry, and materia medica, the major subjects of the preceding years.

The minimum age at graduation must be twenty-one years.

Students who have been admitted to advanced standing are required to pass at least the fourth year of the curriculum in residence at the Medical College in New York City.

A Medical Student's Certificate, issued by the Department of Education of the State of New York, is required of all students before graduation.

Candidates must have dissected at least one lateral half of the cadaver. They must, further, have taken the regular course of two weeks in practical obstetrics, and a certificate covering this course must be filed at the Secretary's office before registration for the final examinations, which begin about the last of May.

The degree will not be conferred upon any candidate who, without the special permission of the Faculty, absents himself from the public Commencement.

EXAMINATIONS AND ADVANCEMENT IN COURSE

1. **Advancement.** Students are advanced in course from one year to the next upon recommendations by heads of departments after examination in the work of the year, but examinations in major or minor subjects may, at the discretion of the head of the department, include all the work previously covered in the year or years preceding the examinations in question.

2. **Examinations.** Examinations for advancement in course, graduation, and admission to advanced standing are held at the close of the year, except that in each course extending through a part of the year only, the examination may be held at the close of the course.

A grade of 75 per cent is required to pass; a student failing to pass is either conditioned or dropped.

A conditioned student may be re-examined at the discretion of the examiner.

A student who fails to pass all of his conditions shall not be allowed to register in the succeeding year of the curriculum, but shall be required to repeat the year.

A dropped student shall not be re-examined.

A student twice dropped from a given year of the curriculum shall not again be registered in this College.

No student of the first year who fails to reach an average standing of 65 per cent and no student of the second year who fails to reach an average standing of 70 per cent shall thereafter be admitted to this College.

PRIZES AND FELLOWSHIPS

The John Metcalfe Polk Prizes, the Dana Prizes, and the Whiting Prizes are open only to students in the Medical College. For these see pages 160 to 161.

The following fellowships are annually awarded by the Medical College

in New York City. For details of award, the Announcement of the Medical College should be consulted.

Fellowships in Clinical Medicine, known as the **Charles L. Sheldon Fellowships**, each of the annual value of \$250 or \$200.

The Fellowship in Pathology of the annual value of \$250.

Diplomas of Licentiate of the Royal College of Physicians of London and Membership of the Royal College of Surgeons of England

Graduates of the Cornell University Medical College are admitted to the final examinations for diploma of Licentiate of the Royal College of Physicians of London and Membership of the Royal College of Surgeons of England.

Hospital Appointments

The students and graduates of the Cornell University Medical College are expected to compete for positions on the resident staff of New York, Bellevue and other hospitals of the city.

THE COMBINED A.B. AND M.D. DEGREES

The two degrees, Bachelor of Arts and Doctor of Medicine, may be obtained in seven years. The first three years must be taken in the College of Arts and Sciences. The fourth year is the first year in the Medical College, and at the end of it the student receives the degree of A.B. The last three years are taken entirely in the College of Medicine at New York City.

COURSES OF INSTRUCTION IN NEW YORK CITY

ANATOMY

1. **Morphology.** Laboratory, 40 hours (elective), and demonstration conference, 22 hours (required). Professors STOCKARD and GUDERNATSCH.
2. **Embryology and Histology.** Laboratory course and lectures—250 hours. October to March. Required of all first year students. Professor GUDERNATSCH, Dr. CHAMBERS, and assistants.
3. **Neuro-Anatomy.** Laboratory, 66 hours. Required of all first year students. Drs. MORRILL and CHAMBERS.
4. **Gross Anatomy of the Human Body.** The following are the courses required. I. The Upper Extremity; II. The Head and Neck; III. The Lower Extremity; IV. The Thorax; V. The Abdomen and Pelvis. Dissection, demonstrations, recitations, and examinations. Total laboratory hours, 288 (minimum). First and second terms of the first year.
 Course VI. A Demonstration course. Optional for first year students.
 Course VII. A study room course in live anatomy. Optional for first year students.
 Course VIII. Dissection Review. A repetition of Courses I-V, giving an opportunity for advanced dissection. Optional for students of the second, third, or fourth year.
 Course IX. Topographical Anatomy. Laboratory, 99 hours. Required during the first term of second year. Professor STOCKARD, Dr. MORRILL, and assistants.
5. **Applied Anatomy.** First term of the second year. Laboratory, 60 hours.
6. **Elective Courses Preparatory to the Specialties.** Optional for students of the third and fourth years. Laboratory, 40 hours. Professor STOCKARD and instructors.
7. **Elective Courses for Advanced Students.** Course I. General Histology. Twenty lectures, March to June. Professor GUDERNATSCH. Registration not later than January.
 Course II. Phases of Histogenesis. Ten lectures from April to June. Dr. CHAMBERS.
 Course III. The Anatomy of the Infant. Twenty lectures arranged for in advance. Professor STOCKARD.
 Course IV. Developmental Arrests and Structural Deficiencies. Fifteen lectures. Professor STOCKARD.
 Course V. Experimental Embryology. Twenty lectures with conferences considering the recent literature of the subject. March to June. Professor STOCKARD.
 Course VI. Histological Seminary and Laboratory Work. Entire year. Professor GUDERNATSCH.
 Course VII. Regional Anatomy. Three half days for two months. Dr. MORRILL and assistants.
 Course VIII. Fourth Year Electives. Arranged to fit individual cases. Limited number of fourth year students.
8. **Anatomical Research.** Directed by members of the staff of instruction.

PHYSIOLOGY

Physiology. Third term of first year: four lectures a week, three laboratory periods, two conference quizzes, and a written review. First term of second year: lectures daily, three laboratory periods, conference quizzes and written reviews; fortnightly seminary.

Physiology, Experimental and Clinical. This course immediately follows the preceding course. The staff in the Department of Physiology is composed of Professor LUSK and instructors.

CHEMISTRY

Organic Chemistry. First year. First term: two lectures a week. Second term: two lectures, one recitation, and two laboratory periods each week.

Physiological Chemistry. Third term: three lectures, two recitations, and three laboratory periods each week.

Chemical Pathology. Elective for fourth year.

Research in Chemistry. For advanced students by appointment.

The staff in the Department of Chemistry is composed of Professor BENEDICT, Dr. MORROW, Mr. OSTERBERG and assistants.

PHARMACOLOGY AND MATERIA MEDICA

1. **Elementary Pharmacy, Toxicology, and Principles of Prescription Writing.** Twenty hours.
2. **Systematic Pharmacology.** Second and third terms; forty-five hours devoted to lectures, conferences and written reviews. Professor HATCHER.
3. **Laboratory in Pharmacology.** Ninety hours. Professor HATCHER and Dr. EGGLESTON.
4. **Research.** Elective. Under the supervision of members of the staff.

MEDICINE

Second Year. Recitations; physical diagnosis (96 hours).

Third Year. Recitations (two each week) and written reviews; lectures (twenty-two in number); weekly clinics in College Dispensary and Bellevue Hospital; medical diagnosis.

Fourth Year. Practical work in Bellevue and New York Hospitals.

Electives: Students of the fourth year.

I. Clinical clerkships, New York Hospital, one month, all day, five students.

II. Clinical clerkships, Bellevue Hospital, one month, all day. Five students.

III. Clinical electrocardiography and polygraphy, two afternoons a week for one month. Limited to eight students. Dr. PARDEE at New York Hospital.

IV. Course in advanced clinical pathology. Three afternoons a week for one month. Limited to five students. Dr. R. G. STILLMAN at New York Hospital.

V. Clinical Bacteriology and Methods of Examinations for Spermatozoa. Forty-eight hours.

VI. Serum Diagnosis and Tuberculin Diagnosis. Complement Fixation and Wassermann Reaction. Ninety-six hours.

VII. Exudates and Transudates. Twenty-four hours.

VIII. Serum, Vaccine and Tuberculin Therapy. Twenty-four hours.

IX. Examination of Feces. Twenty-four hours.

X. Clinical Chemistry. Thirty-six hours.

Clinical Pathology

Third Year. Laboratory lectures, and recitations (110 hours).

Fourth Year. Laboratory and research by appointment.

Research for graduate students by appointment.

The staff in medicine and clinical pathology is composed of Professors CONNER, SWIFT, E. DUBOIS, PALMER, NILES, THRO, LAMBERT, C. E. NAMMACK, and Assistant Professor SHELDON; Drs. EINHORN, BERKELEY, BARR, PARDEE, MILTIMORE, JENISON, BRUNDAGE, RICHARDS, SCHWARTZ, STILLMAN, JACKSON, HOLLAND, CECIL, BRINK, BURBANK, P. DUBOIS, PETERS, SEAMON and C. H. NAMMACK.

NEW YORK HOSPITAL, CORNELL MEDICAL DIVISION

Director, Professor of Medicine.

Hospital and University Appointees

Attending Physician, Professor of Medicine, Associate Attending Physician, Assistant Professor of Medicine. Associate Attending Physician, Instructor in Clinical Medicine. Clinical Pathologist, Instructor in Clinical Medicine. Pathologist, Professor of Bacteriology. Two Assistant Pathologists.

House Staff, Two Years Service

House Physician. First Senior Assistant Physician. Second Senior Assistant Physician. Junior Assistant Physician. Fellow in Medicine. Clinical Clerks (in sections of 10).

BELLEVUE HOSPITAL, CORNELL (SECOND MEDICAL) DIVISION**Hospital and University Appointees**

Director (Associate Professor of Medicine). Two Visiting Physicians (a. Professor of Therapeutics, Assistant Professor of Medicine). Three Assistant Visiting Physicians (a. Professor of Clinical Pathology; b. Assistant Professor of Medicine; c. Assistant Professor of Therapeutics). Five Adjunct Assistant Visiting Physicians. (a. Instructor in Medicine; b. Instructor in Clinical Pathology and Medicine; c. Instructor in Therapeutics; d. Instructor in Clinical Pathology; e. Instructor—on leave of absence—). One Clinical Pathologist. Five house Staff (a. Resident Physician, 1 year; b. House Physician, 2 years; c. Senior Physician, 2 years; d. Junior Physician, 2 years; e. Junior Physician, 1½ years; f. Physician, 1½ years).

This entire staff is on continuous duty throughout the college year, and during the summer season the service is maintained by a considerable portion of the staff.

In addition to the regular hospital appointees and internes, the Medical College supplies from its Department of Medicine for service in Bellevue Hospital a corps of laboratory assistants, research workers, and a special nurse.

GENERAL THERAPEUTICS

Didactic Lectures. One hour a week during the last term of the third year. Required of third year students. Professor MEARA.

Clinical Clerkships. In conjunction with the Department of Medicine this department offers to each student a "clerkship" in the wards of Bellevue Hospital for a continuous period of service, half of which time will be devoted especially to problems of medicine and half to those of therapeutics.

Recitations. Three hours a week for one-half term. March to May. Required of third year students. Dr. GOODRIDGE.

Research. For qualified students by appointment.

SURGERY

Second Year. Recitations; surgical examinations and diagnosis in the New York and Hudson Street Hospitals, clinics.

Third Year. Recitations; sections in the New York Hospital; lectures (thirty-three in number), weekly college clinics, first term; practical surgery at the New York Hospital (second and third terms). Operative Surgery.

Fourth Year. First term: lectures and clinics. Second term: clinical clerkships in Bellevue and New York Hospitals (six weeks). Third term. Electives.

The staff in this department is composed of Professors GIBSON, HARTWELL, TAYLOR, WOOLSEY, ROGERS, COLEY, LILIENTHAL, HAYNES, and LEE; Associate Professor GIBSON; Assistant Professors HITZROT, TURNURE, and HOGUET, Drs. WING, HOAG, BEEKMAN, SANTEE, GERSTER, SPAULDING BULKLEY, WORCESTER, KENYON, VANCE, BUTLER, SULLIVAN, ARMSTRONG, EVERINGHAM, BOHRER, DUDLEY, BOLLING, and SOULE.

HOSPITAL WORK

New York Hospital, Cornell (First Surgical) Division. The staff of instruction is composed of Professors GIBSON and LEE, and Assistant Professor HITZROT.

Hudson Street Hospital. The staff of instruction is composed of Assistant Professor TURNURE and Drs. KENYON and BOLLING.

Bellevue Hospital, Cornell (Second Surgical) Division. The staff of instruction is composed of Professors HARTWELL, WOOLSEY, and ROGERS; and Drs. BULKLEY, WORCESTER, VANCE, SANTEE, ARMSTRONG, EVERINGHAM, BOHRER, and DUDLEY.

Surgical "Clerkships." Each student devotes his entire day for six weeks to the study of patients in the wards of New York and Bellevue hospitals.

OBSTETRICS

Instruction in this department is given during the second and third years of the curriculum. The work in obstetrics comprises: 1. recitations; 2. lectures; 3. obstetric clinics and conferences; 4. attendance upon cases of confinement; 5. manikin practice and section work; 6. obstetric histology, pathology, and bacteriology.

The staff of instruction in obstetrics is composed of Professor EDGAR and Drs. BAILEY and WILLIAMSON.

PATHOLOGY

1. **General Pathology.** Lectures, and museum and microscopical demonstrations and recitations, 246 hours. Required in second and third years. Professor EWING and Drs. L'Esperance and MULLER.

2. **Pathological Anatomy.** Lectures and demonstrations, 84 hours. Required in the second and third years. Professors SCHULTZE and NORRIS, Dr. CASSASSA and assistants.

3. **Autopsy Technics.** Fourth year. Section teaching at Morgue. Professors SCHULTZE and NORRIS, and Dr. CASSASSA.

4. **Chemical Pathology.** Elective lectures and laboratory in the fourth year. Professor BENEDICT and Dr. COCA.

5. **Medico-legal Pathology.** Third and fourth years. Professor SCHULTZE.

Electives. Fourth year.

1. Pathological technique; 2. Junior diagnosis and general oncology; 3. Gynecological pathology; 4. Dermatopathology; 5. Neuropathology; 6. Surgical pathology; 7. Special pathology and study of groups of cases with the production of a thesis.

CANCER RESEARCH

Since 1904 the work of the Huntington Fund for Cancer Research has been located in the laboratories of Cornell University Medical College under the general direction of the Department of Pathology, and with the collaboration of heads of other departments. Later through the support of Dr. James Douglas, and the co-operation of the Board of Governors it has been extended to the laboratories of the Memorial Hospital. A laboratory building accommodating pathology, chemistry and physics has recently been erected.

The organization of this work includes: pathology, Prof. EWING; bacteriology, Prof. TORREY; immunology, Dr. COCA; chemistry, Prof. BENEDICT; and biology, Prof. STOCKARD.

Clinical studies in the diagnosis, natural history, and treatment of neoplastic diseases are conducted in the hospital by the members of the staff. The general conduct of the ward service is in charge of Dr. Wm. S. STONE, Assistant Director of Cancer Research. The Radium Department is in charge of Dr. H. H. JANEWAY, assisted in special fields by Drs. H. C. BAILEY, B. S. BARRINGER, and others. The radium laboratory possesses three grams of radium metal, supplied by the National Radium Institute through Dr. JAMES DOUGLAS. The radium laboratory is in charge of Prof. WM. DUANE, Associate Consulting Physicist and Mr. GIACCHINO FAILLA, Physicist, and two assistants. The physics department also enjoys the services of Prof. J. S. SHEARER, Consulting Physicist.

BACTERIOLOGY

Laboratory work and lectures, 150 hours. Required in the second year. Professor ELSER.

NEUROLOGY

Second Year. Lectures and clinics. Prof. DANA.

Third Year. Clinics. Professor DANA.

Fourth Year. Clinics; sections; clinical clerkships.

The staff in this department is composed of Professor DANA, Associate Professor KENNEDY, and Assistant Professor FRINK, and Dr. OBERNDORF.

PSYCHIATRY

Third Year. Didactic lectures; clinical demonstrations and practical exercises.

The staff in this department is composed of Professor KIRBY and Dr. MACCURDY.

PEDIATRICS

Third Year. Weekly clinical lectures and sections.

Fourth Year. Weekly clinical lectures; clinical clerkships in the New York Hospital.

The staff in this department is composed of Professor WINTERS, and Drs. ROPER, TYRRELL and WILSON.

GYNECOLOGY

Second Year. Recitations and lectures.

Third Year. Section teaching.

Fourth Year. Elective.

The staff in this department is composed of Associate Professor WARD, and Drs. FARRAR, McGRATH, BARROWS and STRONG.

UROLOGY

Third Year. Clinics in Bellevue Hospital, weekly during second term; lectures, ten in number first term; sections in the College Dispensary.

Fourth Year. Clinical clerkships.

The staff of this department is composed of Professor KEYES and Drs. BARRINGER, JECK, and LAVENDERA.

DERMATOLOGY

Third Year. Sections.

Fourth Year. Clinics.

The staff in this department is composed of Professor ELLIOTT and Dr. SCHWARTZ.

LARYNGOLOGY AND RHINOLOGY**Third Year.** Sections.**Fourth Year.** Didactic lectures and clinical exercises. Professor SMITH and Dr. MONTGOMERY.**OPHTHALMOLOGY****Third Year.** Sections and Clinics.**Fourth Year.** Clinics. Professor REESE and Drs. SAMUELS and VANDEGRIFT.**OTOLOGY****Third Year.** Sections in College Dispensary.**Fourth Year.** Clinics. Professor WHITING, Drs. CRAIG and MCAULIFFE.**ORTHOPEDIC SURGERY****Third Year.** Lectures, recitations and sections.**Fourth Year.** Ward work in the Hospital for the Ruptured and Crippled. Professor WALLACE and Drs. CILLEY, NUTTER, and STEPHENS.**ROENTGENOLOGY****Third and Fourth Year.** Lectures and demonstrations. Professor COLE and Dr. HERENDEEN.**HYGIENE****Second Year.** Laboratory and Field Work. Professor TORREY.**MEDICAL JURISPRUDENCE****Fourth Year.** Courses of lectures from the standpoint of medico-legal autopsy (twenty-one hours). Professor SCHULTZE.

The clinical aspects of this subject are covered in the regular courses of study by several departments and by special lectures. Professors EDGAR, HATCHER, and KIRBY.

**COURSES OF INSTRUCTION IN THE ITHACA DIVISION OF
THE MEDICAL COLLEGE****ANATOMY**

Courses 1, 2, 3, 5, and 6 are required of first year medical students.

1. **Anatomy of the Head and Neck.** First term. Credit four hours, twenty-two actual hours a week for seven weeks. Professor KERR, Mr. STEWART and Mr. VAN WAGENEN. Laboratory work; dissection and conference.2. **Anatomy of the Thoracic Walls and Viscera.** First term. Credit, one hour, twenty-two actual hours a week for two weeks. Professor KERR, Mr. STEWART, and Mr. VAN WAGENEN. Laboratory work; dissection and conferences.3. **Anatomy of the Abdominal and Pelvic Walls and Viscera.** First term. Credit four hours, twenty-two actual hours a week for seven weeks. Professor KERR, Mr. STEWART and Mr. VAN WAGENEN. Laboratory work; dissections and conferences.5. **Anatomy of the Central Nervous System.** Second term. Credit, two hours, five actual hours a week. Professor KERR and Mr. STEWART. Dissection with occasional demonstrations and recitations.6. **Anatomy of the Living Body.** Second term. Credit one hour, two actual hours a week. Dr. KERR and Mr. STEWART.7. **Anatomy of the Upper Extremity.** First and second terms. Credit, two to three hours. Professor KERR and ———. Laboratory work; dissection and conference.8. **Anatomy of the Lower Extremity.** First and second terms. Credit, two to three hours. Professor KERR and ———. Laboratory work; dissection and conference.9. **Topographical Anatomy.** First and second terms. Credit, two to five hours. Prerequisite anatomy, courses 1, 2, 3, 7, or 8. Professor KERR.12. **Research in Anatomy.** For qualified students. First and second terms. Professor KERR.**HISTOLOGY AND EMBRYOLOGY**

Courses 10, 10a, and 5 are required of students of medicine.

10. **Histology.** First term. Credit four hours; second term, credit five hours. Professor KINGSBURY. Four laboratory periods and two lectures each week.10a. **Histology.** First term. Credit, three hours. Professor GAGE. Two laboratory periods and two lecture-conferences each week.5. **The Nervous System and Organs of Sense.** Third term. Credit, three hours. Professor KINGSBURY. Two laboratory periods with laboratory conferences and quizzes.3. **Special Histology and Technique.** First term. Credit, three hours. Professor GAGE and Mr. KINGERY. One recitation, demonstration, or lecture. Two laboratory periods by assignment.

7. **Advanced Work in Histology and Embryology.** First, second and third terms. Professor KINGSBURY and Instructors. Laboratory work, eight or more actual hours a week, with seminary. Prerequisite courses 10 and 3 and a reading knowledge of French and German.

8. **Seminary.** Second and third terms. One hour each week.

DEPARTMENT OF PHYSIOLOGY AND BIOCHEMISTRY

1A. **Physiology of the Cell, Muscle, and Nerve.** First term. Credit, two hours. Professor SIMPSON and assistants. Two lectures or recitations weekly with demonstrations.

1B. **Physiology of Heart and Circulation, Blood and Lymph, Respiration, Digestion and Excretion.** Second term. Credit, three hours. Professor SIMPSON and assistants. Three lectures or recitations weekly, with demonstrations and examinations.

1C. **Physiology of Internal Secretion, Animal Heat and Reproduction.** Third term. Six lectures weekly for the first six weeks of the term. Professor SIMPSON and Assistants. Credit three hours.

4A. **Experimental Physiology.** First term. Credit, two hours. Professor SIMPSON and assistants. One five-hour laboratory period weekly.

4B. **Experimental Physiology.** Second term. Credit two hours. Professor SIMPSON and assistants. One two-hour and one three-hour laboratory period weekly.

4C. **Experimental Physiology.** Third term. Credit three hours. Seven and one-half hours laboratory work.

5. **Physiology of the Nervous System and Special Senses.** Third term. Credit, three hours. Professor SIMPSON. Lectures, six weekly for the last six weeks of the term.

7. **Seminary.** Second term. Credit one hour. [Not given in 1918-19.]

8. **Advanced Work and Research.** For qualified students, by appointment.

15. **General Biochemistry.** Third term. Credit, five hours. Three lectures or recitations, eleven hours laboratory work weekly. Assistant Professor SUMNER and Mr. BODANSKY.

17. **Special Chapters in Biochemistry.** First term. Credit one hour. Assistant Professor SUMNER. Lectures.

20. **Advanced Work and Research in Biochemistry.** First, second and third terms. Assistant Professor SUMNER.

Course 32. Required course. See page 82.

NEW YORK STATE VETERINARY COLLEGE

For detailed information concerning the work of the Veterinary College, candidates for admission to that college should consult the Announcement of the Veterinary College which will be sent gratis on application to the Secretary of the University.

FACULTY

JACOB GOULD SCHURMAN, A.M., D.Sc., LL.D., President of the University.

VERANUS ALVA MOORE, B.S., M.D., V.M.D., Professor of Comparative Pathology, Bacteriology and Meat Inspection; and Dean of the College.

JAMES LAW, F.R.C.V.S., Emeritus Professor of Principles and Practice of Veterinary Medicine.

SIMON HENRY GAGE, B.S., Emeritus Professor of Histology.

PIERRE AUGUSTINE FISH, D.Sc., D.V.S., D.V.M., Professor of Veterinary Physiology and Secretary of the Faculty. (Absent, in military service.)

GRANT SHERMAN HOPKINS, D.Sc., D.V.M., Professor of Veterinary Anatomy and Anatomical Methods.

WALTER LONG WILLIAMS, Professor of Principles and Practice of Veterinary Surgery, Obstetrics, Zootechny, and Jurisprudence.

DENNIE HAMMOND UDALL, B.S.A., D.V.M., Professor of Veterinary Medicine and Hygiene. (Absent, in military service.)

HOWARD JAY MILKS, D.V.M., Professor of Therapeutics and Small Animal Clinic.

JAMES NATHAN FROST, D.V.M., Professor of Veterinary Surgery.

EARL SUNDERVILLE, D.V.M., Assistant Professor of Veterinary Anatomy.

CHARLES ERNEST HAYDEN, A.B., D.V.M., Assistant Professor of Veterinary Physiology.

RAYMOND RUSSELL BIRCH, B.S., D.V.M., Superintendent of the Veterinary Experiment Station.

SAMUEL A. GOLDBERG, A.M., Ph.D., D.V.M., Assistant Professor of Pathology.

HENRY ASMUS, Assistant Professor of Horseshoeing.

WILLIAM EDWARD MULDOON, D.V.M., Assistant Professor of Materia Medica. (Absent, in military service.)

WILLIAM ARTHUR HAGAN, M.S., D.V.M., Assistant Professor of Pathology and Bacteriology.

WALTER DENSLOW WAY, D.V.M., Assistant Professor of Veterinary Medicine.

CHARLES MILTON CARPENTER, D.V.M., Assistant Professor in Laboratory Diagnosis.

EARLE BUDD HOPPER, D.V.M., Instructor in Surgery.

HORATIO LUTHER VAN VOLKENBERG, D.V.M., Instructor in Pathology.

EDWARD A. SCHMOKER, Instructor in Obstetrics.

JAMES WEST FULLER, Assistant in Diagnosis.

JAMES EDWARD CREIGHTON, A.B., Ph.D., LL.D., Dean of the Graduate School.

HENRY HIRAM WING, M.S. in Agr., Professor of Animal Husbandry.

BENJAMIN FREEMAN KINGSBURY, Ph.D., M.D., Professor of Histology and Embryology.

ARTHUR WESLEY BROWNE, M.S., Ph.D., Professor of Inorganic and Analytical Chemistry.

ELMER SETH SAVAGE, M.S.A., Ph.D., Professor of Animal Husbandry.

MERRITT WESLEY HARPER, B.Sc., M.S., Professor of Animal Husbandry.

ERNEST GEORGE MERRITT, M.E., Professor of Physics.

ROSWELL CLIFTON GIBBS, A.B., A.M., Ph.D., Professor of Physics.
 HUGH DANIEL REED, B.S., Ph.D., Assistant Professor of Zoology.
 JOHN EDWARD FOGLESONG, M.A., Instructor in Inorganic Chemistry.
 STUART DEMING JACKSON, A.B., Instructor in Organic Chemistry.
 HUGH McMILLAN KINGERY, A.M., Instructor in Histology and Embryology.
 (Absent on leave.)
 ————, Assistant in Histology and Embryology.
 JOHN S. LATTA, B.S., Assistant in Histology and Embryology.

NONRESIDENT LECTURERS FOR 1918-1919

J. G. Wills, State Veterinarian.....	Albany
L. B. Leonard, Bureau of Animal Industry.....	Albany
John W. Adams.....	Philadelphia, Pa.
A. L. Brockway.....	Syracuse
Capt. F. C. Waite, Surgeon General's Office.....	Washington, D. C.
Lt. Col. R. J. Stanclift, Surgeon General's Office.....	Washington, D. C.
J. A. MacNeil, State Veterinarian.....	Trenton, N. J.
W. H. Boynton.....	Manila, P. I.

THE VETERINARY COLLEGE

Instruction in veterinary subjects has been a part of the work of Cornell University since its foundation. During the earlier years of the University, this instruction was in charge of the Department of Agriculture, and it was continued as a distinctive part of the work of the College of Agriculture when in 1888 that college was created as the successor of the Department of Agriculture.

The Veterinary College was established as a separate college of Cornell University in the year 1894, in accordance with an Act of the Legislature of the State of New York creating a State Veterinary College at Cornell University.

The Veterinary College as it exists to-day is supported by the State of New York, and is administered by Cornell University under the direction of a committee of its Board of Trustees known as the Veterinary College Council. In respect of all academic interests, the Veterinary College is an integral part of Cornell University.

For admission to the Veterinary College, see page 37; for tuition in the Veterinary College, see page 44.

THE DEGREE OF DOCTOR OF VETERINARY MEDICINE

The undergraduate instruction for regular students in the Veterinary College leads to the degree of Doctor of Veterinary Medicine, the requirement for which is the completion of the following curriculum.

CURRICULUM OF FOUR YEARS

First Year

	No. of Course	Credit 1st Term	Credit 2d Term	Total of Actual Hours
Physics	2	5	—	80
Histology	6	2	4	200
Anatomy	1	3	—	448
"	2	1	—	
"	3	2	—	
"	4	—	6	
Physiology, Lectures	10	3	—	96
" Recitations	11	—	3	
Chemistry	1	—	6	144
Military Drill	1	—	—	96
		16	19	1064

Second Year

Anatomy	5	4	—	256
"	6	2	—	
Physiology, Recitations	12	2	—	32
" Lecture	13	—	2	32
" Laboratory	14	2	—	80
Pharmacology	20	2	—	32
"	20a	—	2	32
Materia Medica	21	2	—	80
General Pathology	40	4	—	112
Bacteriology	43	—	5	152
General Surgery	30	—	4	112
Physical Diagnosis	51	—	2	32
Zoology	1a	—	3	96
Military Drill		—	—	96
		18	18	1144

Third Year

Consulting Clinic	34	1	1	96
Small Animal Clinic	25	1	1	96
Surgical Exercises	31	1	—	48
Medicine	50	2	3	80
Animal Husbandry	20	3	3	128
Autopsies	—	1	1	96
Special Surgery	32	5	—	80
Special Pathology	41	2	2	112
Parasitology	44	2	—	56
Physical Diagnosis	—	1	—	16
Diseases of Small Animals	22	—	2	32
Infectious Diseases, Lectures	42	—	2	32
" " Laboratory	—	—	1	40
Surgical Anatomy	—	—	1	40
Urine Analysis	15	—	1	40
		19	18	992

Fourth Year

Materia Medica	23	2	—	
Surgical Clinic	33	2	2	
Ambulatory Clinic	53	2	2	

	No. of Course	Credit 1st Term	Credit 2d Term	Total of Actual Hours
Small Animal Clinic	25	1	1	
Consulting Clinic	34	1	1	
Embryology	—	2	—	
Horseshoeing	52	1	2	
Medicine	—	3	2	
Immunity	—	2	—	
Botany	—	3	—	
Autopsies	—	1	1	
Meat Inspection	—	—	1	
Dairy Inspection	—	—	1	
Obstetrics	36	—	3	
Diseases of the Genital Organs	—	—	2	
Ophthalmology	55	—	1	
Hygiene	56	—	1	
		20	20	

For the Curriculum of Seven Years in Agriculture and Veterinary Medicine, see page 117.

SCHOLARSHIPS AND PRIZES

The Horace K. White Prizes; The Hollingworth Honorarium for Research; The Jane Miller Prize; and The James Gordon Bennett Prize are awarded to students in the Veterinary College. For these and for the scholarships and prizes that are open to all students of the University, see page 155.

Student Assistants. Three positions as student assistants are open to capable veterinary students in their senior year (salaries from \$125 to \$300 a year).

STUDY FOR PRACTITIONERS

Veterinarians who are legally authorized to practise at their places of residence will be admitted to any class in the College at any time and for such period as they may elect, without entrance examination. They will be entirely free to elect any studies that are being regularly taught at the time, and may enjoy all opportunities and facilities offered to regular students as long as these opportunities do not interfere with the instruction of the regular students.

No tuition will be required from licensed veterinarians practising in the State of New York.

COURSES OF INSTRUCTION

ANATOMY

1. **Comparative Osteology.** Three hours, first term.
2. **Arthrology.** One hour, first term. Professor HOPKINS and assistants.
3. **Myology and Abdominal Viscera.** Three hours, first term. Professor HOPKINS, Assistant Professor SUNDERVILLE, and assistants.
4. **Myology, Thoracic and Abdominal Viscera, Lymphatic System and Organs of Special Senses.** Five hours, second term. Professor HOPKINS, Assistant Professor SUNDERVILLE, and assistants.
5. **Blood Vessels and Nerves of the Arm and Leg.** Three hours, first term. Professor HOPKINS, Assistant Professor SUNDERVILLE and assistants.
6. **Blood Vessels and Nerves of the Head; the Central Nervous System and Genital Organs.** Three hours, first term. Professor HOPKINS, Assistant Professor SUNDERVILLE, and assistants.
7. **Surgical Anatomy.** Second term.
Open to those who have completed the required courses in anatomy and to practitioners. Professor HOPKINS and Assistant Professor SUNDERVILLE.
8. **Advanced Anatomy.** Two or more hours. Throughout the year. Professor HOPKINS and Assistant Professor SUNDERVILLE.

PHYSIOLOGY

10. **The Physiology of the Nutrition and Secretion of the Domesticated Animals.** First term, credit three hours. Professor FISH.
11. **Physiology Recitations.** Second term, credit three hours. Professor FISH and Assistant Professor HAYDEN.
12. **Physiology Recitations.** First term, second year, credit two hours. Professor FISH and Assistant Professor HAYDEN.

13. **The Physiology of the Muscular and Nervous Systems.** Second term, second year, credit two hours. Assistant Professor HAYDEN.
14. **Physiological Laboratory.** First term, second year. Professor FISH, Assistant Professor HAYDEN, and assistants.
15. **Urine Analysis.** Third year, second term, three hours a week. Professor FISH, Assistant Professor HAYDEN, and assistants.
16. **Advanced Physiology.** Professor FISH and assistants.

MATERIA MEDICA AND SMALL ANIMAL CLINIC

20. **Pharmacology.** First term. Professor MILKS.
- 20a. **Pharmacology.** A continuation of course 20. Second term.
21. **Materia Medica and Pharmacy Laboratory.** First term. Professor MILKS and assistant.
22. **Diseases of the Small Animals.** Second term, third year. Professor MILKS.
23. **Recitations in Materia Medica and Therapeutics.** First term, fourth year. Professor MILKS.
24. **Advanced Work.** Professor MILKS and assistant.
25. **Small Animal Clinic.** Six actual hours a week. Professor MILKS and assistant.
- Required of junior students in their second term. The seniors take it throughout the year.

ZOOLOGY

13. **Elements of Zoology.** Second term, credit three hours. Assistant Professor REED and Mr. SHADLE. Laboratory fee, \$3.

ANIMAL HUSBANDRY

20. **General Elementary Course in Animal Husbandry.** For students in the New York State Veterinary College only. Throughout the year, credit three hours each term. Professors WING, HARPER, and SAVAGE.

SURGERY

30. **General Surgery.** Second year, second term.
- Prerequisite courses 1, 2, and 3 in anatomy, course 10 in physiology, course 6 in histology and embryology, and course 40 in general pathology. Assistant Professor FROST.
31. **Surgical Exercises.** Third year, first term. Assistant Professor FROST and Dr. HOPPER.
32. **Special Surgery.** Third year, first term. Assistant Professor FROST.
33. **Surgical Clinics.** Throughout the fourth year. Assistant Professor FROST and Dr. HOPPER. Prerequisites, courses 30 and 31.
34. **Consulting Clinic.** Six actual hours a week for three terms. Assistant Professor FROST and Dr. HOPPER.

OBSTETRICS AND DISEASES OF BREEDING CATTLE, JURISPRUDENCE

35. **Jurisprudence.** A series of eight lectures. Second term, third year.
36. **Obstetrics and the Diseases of Breeding Animals.** Second term, fourth year. Professor WILLIAMS. Prerequisite course 30.
- Research. Open to graduate students.

COMPARATIVE PATHOLOGY, BACTERIOLOGY, AND MEAT INSPECTION

40. **General Pathology.** First term. Prerequisite, normal histology and at least one year's work in anatomy and physiology. Professor MOORE.
41. **Special Pathology.** Third year. Prerequisite course 40. Dr. GOLDBERG.
42. **Pathology of Infectious Diseases.** Second term. Open to students who have taken courses 40 and 41, and have taken or are taking course 43. Professor MOORE.
43. **Bacteriology.** Second term. Open to students who have taken or are taking course 6 in microscopy. Professor MOORE and Dr. HAGAN. The lectures may be taken as a two-hour course.
44. **Parasites.** First term. Dr. HAGAN.
45. **Research in Bacteriology and Pathology.** Prerequisite courses 40 and 43. Professor MOORE and Dr. HAGAN.
46. **Laboratory Methods of Diagnosis.** Prerequisite courses 40 and 43. Assistant Professor PICKENS.
47. **Post Mortem Examinations.** Throughout the senior year. Dr. GOLDBERG.
48. **Meat and Dairy Inspection.** Second term, fourth year. Professor MOORE.
49. **Seminary.** Throughout the year. For graduates and advanced students. Professors MOORE and HAGAN.

VETERINARY MEDICINE

50. **Veterinary Medicine, Principles and Practice.** Third year, first term. Fourth year, first term. Professor UDALL or Dr. WAY.
51. **Physical Diagnosis.** Second term, second year. First term, third year. Dr. WAY.
52. **Horseshoeing.** Fourth year. Assistant Professor ASMUS.
53. **Ambulatory Clinic.** Professor UDALL and Dr. WAY.
55. **Ophthalmology.** Fourth year, second term. Dr. WAY.
56. **Hygiene.** Fourth year, second term. Dr. WAY.

THE COLLEGE OF AGRICULTURE

For detailed information concerning the work of the College of Agriculture, candidates for admission to that college should consult the Announcement of the College of Agriculture which will be sent gratis on application to the Secretary of the University.

Instruction in agricultural subjects has been a part of the work of Cornell University since its foundation. The Department of Agriculture, which had charge of this instruction during the earlier years of the University, was in 1888 succeeded by the College of Agriculture, which was in that year organized and established as a separate college of the University. In 1904 the College of Agriculture became, by an Act of the Legislature, the New York State College of Agriculture, and the equipment of the College of Agriculture of Cornell University along with the annual appropriations made by the University for the support of agricultural instruction, was employed and continued to be employed to strengthen and support the work of the New York State College of Agriculture.

The College of Agriculture as it exists today is in large part supported by the State of New York, and is administered by Cornell University under the direction of a committee of its Board of Trustees known as the Agricultural College Council. In respect of all academic interests, the College of Agriculture is an integral part of Cornell University.

The Federal Experiment Station at Cornell University was organized in 1887, and is in charge of the Dean of the College of Agriculture. The annual federal appropriation is devoted wholly to experimental work and research in the Departments of Plant Breeding, Soil Technology, and Entomology.

STAFF OF INSTRUCTION AND EXTENSION WORK

JACOB GOULD SCHURMAN, A.M., D.Sc., LL.D., President of the University.

ALBERT RUSSELL MANN, B.S.A., A.M., Dean of the College of Agriculture, Director of the Experiment Station, and Director of Extension.

ISAAC PHILLIPS ROBERTS, M.Agr., Professor of Agriculture, Emeritus.

JOHN HENRY COMSTOCK, B.S., Professor of Entomology and General Invertebrate Zoology, Emeritus.

HENRY HIRAM WING, M.S. in Agr., Professor of Animal Husbandry.

THOMAS LYTTLETON LYON, Ph.D., Professor of Soil Technology.

JOHN LEMUEL STONE, B.Agr., Professor of Farm Practice.

JAMES EDWARD RICE, B.S.A., Professor of Poultry Husbandry.

GEORGE WALTER CAVANAUGH, B.S., Professor of Chemistry in its Relations to Agriculture.

GEORGE NIEMAN LAUMAN, B.S.A., Professor of Rural Economy.

HERBERT HICE WHETZEL, M.A., Professor of Plant Pathology.

ELMER OTTERBEIN FIPPIN, B.S.A., Extension Professor of Soil Technology.

GEORGE FREDERICK WARREN, Ph.D., Professor of Farm Management.

WILLIAM ALONZO STOCKING, M.S.A., Professor of Dairy Industry.

WILFORD MURRY WILSON, M.D., Professor of Meteorology.

RALPH SHELDON HOSMER, B.S.A., M.F., Professor of Forestry.

JAMES GEORGE NEEDHAM, Ph.D., Professor of Entomology and Limnology.

ROLLINS ADAMS EMERSON, D.Sc., Professor of Plant Breeding.

HARRY HOUSER LOVE, Ph.D., Professor of Plant Breeding.

DONALD REDDICK, Ph.D., Professor of Plant Pathology.

EDWARD GERRARD MONTGOMERY, M.A., Professor of Farm Crops.

GEORGE ALAN WORKS, B.Ph., M.S. in Agr., Professor of Rural Education.

FLORA ROSE, B.S., M.A., Professor of Home Economics.

- MARTHA VAN RENSSELAER, A.B., Professor of Home Economics.
JAMES ADRIAN BIZZELL, Ph.D., Professor of Soil Technology.
GLENN WASHINGTON HERRICK, B.S.A. Professor of Economic Entomology and Entomologist of the Experiment Station.
HOWARD WAIT RILEY, M.E., Professor of Rural Engineering.
HAROLD ELLIS ROSS, M.S.A., Professor of Dairy Industry.
HUGH CHARLES TROY, B.S.A., Professor of Dairy Industry.
SAMUEL NEWTON SPRING, B.A., M.F., Professor of Silviculture.
KARL MCKAY WIEGAND, B.S., Ph.D., Professor of Botany.
WILLIAM HENRY CHANDLER, M.S. in Agr., Ph.D., Professor of Pomology.
ARTHUR BERNHARD RECKNAGEL, B.A., M.F., Professor of Forest Management and Utilization.
MERRITT WESLEY HARPER, M.S., Professor of Animal Husbandry.
CYRUS RICHARD CROSBY, A.B., Extension Professor of Entomology.
ELMER SETH SAVAGE, M.S.A., Ph.D., Professor of Animal Husbandry.
KENNETH CARTER LIVERMORE, M.S. in Agr., Professor of Farm Management.
EDWARD ALBERT WHITE, B.Sc., Professor of Floriculture.
ALVIN CASEY BEAL, Ph.D., Professor of Floriculture.
HERBERT ANDREW HOPPER, B.S.A., M.S., Extension Professor of Animal Husbandry.
EDWARD SEWALL GUTHRIE, M.S. in Agr., Ph.D., Professor of Dairy Industry.
MAURICE CHASE BURRITT, M.S. in Agr., Professor in Extension Service, and Vice Director of Extension.
WILLIAM CHARLES BAKER, B.S.A., Professor of Drawing.
MORTIER FRANKLIN BARRUS, Ph.D., Extension Professor of Plant Pathology.
LEWIS JOSEPHUS CROSS, B.A., Ph.D., Professor of Chemistry in its Relations to Agriculture.
OSKAR AUGUSTUS JOHANSEN, A.M., Ph.D., Professor of General Biology.
CLYDE HADLEY MYERS, Ph.D., Professor of Plant Breeding.
BRISTOW ADAMS, B.A., Professor, Editor and Chief of Publications.
DICK J. CROSBY, M.S., Professor in Extension Service.
ASA CARLTON KING, B.S.A., Professor of Farm Practice.
CORNELIUS BETTEN, Ph.D., Professor, Secretary and Registrar.
GEORGE ABRAM EVERETT, A.B., LL.B., Professor of Extension Teaching.
FREDERICK LLEWELLYN GRIFFIN, B.S., M.S., Extension Professor of Rural Education.
LEWIS KNUDSON, B.S.A., Ph.D., Professor of Botany.
E. GORTON DAVIS, B.S., Professor of Landscape Art.
RALPH WRIGHT CURTIS, M.S.A., Professor of Landscape Art.
CLAUDE BURTON HUTCHISON, M.S. in Agr., Professor of Plant Breeding.
RALPH WALDO REES, A.B., B.S., Extension Professor of Pomology.
JACOB RICHARD SCHRAMM, A.B., Ph.D., Professor of Botany.
HARRY OLIVER BUCKMAN, M.S.A., Ph.D., Professor of Soil Technology.
RALPH HICKS WHEELER, B.S., Professor in Extension Service.
WILLIAM FOSTER LUSK, B.Ph., M.S.A., Professor of Rural Education.
PAUL WORK, A.B., M.S. in Agr., Acting Professor of Vegetable Crops.
JOHN BENTLEY, JR., B.S., M.F., Professor of Forest Engineering.
PAUL J. KRUSE, A.B., Ph.D., Professor of Rural Education.
ROLLAND MACLAREN STEWART, A.B., Ph.D., Professor of Rural Education.

- JAMES ERNEST BOYLE, Ph.D., Extension Professor of Rural Economy.
DWIGHT SANDERSON, B.S., Professor of Rural Organization.
HOMER COLUMBUS THOMPSON, B.Sc., Professor of Vegetable Gardening.
WILLIAM JOSEPH WRIGHT, B.S., Professor of Rural Education.
JAMES ERNEST BOYLE, Ph.D., Extension Professor of Rural Economy.
JAMES CHESTER BRADLEY, Ph.D., Assistant Professor of Systematic Entomology.
GEORGE CHARLES EMBODY, Ph.D., Assistant Professor of Aquiculture.
Mrs. HELEN BINKERD YOUNG, B.Arch., Assistant Professor of Home Economics.
Mrs. ANNA BOTSFORD COMSTOCK, B.S., Assistant Professor of Nature Study.
HARRY MORTON FITZPATRICK, Ph.D., Assistant Professor of Plant Pathology.
BYRON BURNETT ROBB, B.S. in Agr., M.S. in Agr., Assistant Professor of Rural Engineering.
WALTER WARNER FISK, M.S. in Agr., Assistant Professor of Dairy Industry.
ANNETTE J. WARNER, Assistant Professor of Home Economics.
ROYAL GILKEY, B.S.A., Assistant Professor in Extension Service, and Supervisor of Reading Course for the Farm.
CHARLES TRUMAN GREGORY, Ph.D., Assistant Professor of Plant Pathology.
LEX RAY HESLER, Ph.D., Assistant Professor of Plant Pathology.
WILLIAM HOWARD RANKIN, Ph.D., Assistant Professor of Plant Pathology.
EARL WHITNEY BENJAMIN, B.S. in Agr., M.S. in Agr., Ph.D., Assistant Professor of Poultry Husbandry.
ARTHUR JOHNSON EAMES, A.B., A.M., Ph.D., Assistant Professor of Botany.
JAMES KENNETH WILSON, B.S., Ph.D., Assistant Professor of Soil Technology.
ELMER EUGENE BARKER, Ph.D., Assistant Professor of Plant Breeding.
ROBERT MATHESON, M.S. in Agr., Ph.D., Assistant Professor of Economic Entomology and Assistant Entomologist of the Experiment Station.
BLANCHE EVANS HAZARD, A.B., M.A., Assistant Professor of Home Economics.
DAVID LUMSDEN, Assistant Professor of Floriculture.
JOHN HALL BARRON, B.S.A., Assistant Extension Professor of Farm Crops.
GAD PARKER SCOVILLE, B.S. in Agr., Assistant Extension Professor of Farm Management.
ARTHUR AUGUSTUS ALLEN, Ph.D., Assistant Professor of Ornithology.
LEONARD AMBY MAYNARD, A.B., Ph.D., Assistant Professor of Animal Husbandry.
FOREST MILO BLODGETT, Ph.D., Assistant Extension Professor of Plant Pathology.
HOWARD EDWARD BABCOCK, Ph.B., Assistant Professor, and State Leader of County Agents.
EDWARD RILEY KING, B.S., Assistant Professor of Entomology.
FRANK ELMORE RICE, A.B., Ph.D., Assistant Professor of Chemistry in its Relations to Agriculture.
LESTER WAYLAND SHARP, B.S., Ph.D., Assistant Professor of Botany.
JOHN CLARENCE MCCURDY, B.S., C.E., Assistant Professor of Rural Engineering.
CLARENCE ALFRED BOUTELLE, Assistant Extension Professor of Animal Husbandry.
CHARLES HOWARD ROYCE, M.S.A., Assistant Extension Professor of Animal Husbandry.
GEORGE HARRIS COLLINGWOOD, B.S., A.M., Assistant Extension Professor of Forestry.
MONTGOMERY ROBINSON, Litt.B., B.S., Assistant Professor in Extension Service.
WESLEY WORTH WARSAW, B.S. in A.E., Assistant Extension Professor of Soil Technology.
OTIS FREEMAN CURTIS, A.B., Ph.D., Assistant Professor of Botany.

- THOMAS JOSEPH MCINERNEY, M.S. in Agr., Assistant Professor of Dairy Industry.
EUGENE DAVIS MONTILLON, B.Arch., Assistant Professor of Landscape Art.
JUAN ESTEVAN REYNA, E.E., Assistant Professor of Drawing.
EARL LONG OVERHOLSER, B.S.A., M.A., Assistant Professor of Pomology.
ARTHUR JOHN HEINICKE, B.S.A., M.A., Ph.D., Assistant Professor of Pomology.
OLNEY BROWN KENT, B.S., Ph.D., Assistant Professor of Poultry Husbandry.
HENRY WILLIAM SCHNECK, B.S., M.S.A., Assistant Professor of Vegetable Gardening.
KARL JOHN SEULKE, M.S.A., Ph.D., Assistant Professor of Animal Husbandry.
LOUIS MELVILLE MASSEY, A.B., Ph.D., Assistant Professor of Plant Pathology.
BEULAH BLACKMORE, B.S., Assistant Professor of Home Economics.
BERNARD ALBERT CHANDLER, B.S., M.F., Assistant Professor of Forest Utilization.
EDWARD GARDNER MISNER, B.S., Assistant Professor of Farm Management.
MARY FRANCES HENRY, A.B., Assistant Professor of Home Economics.
SARAH LUCILE BREWER, B.S., Assistant Professor of Home Economics.
HELEN CANON, B.A., B.S., Assistant Extension Professor of Home Economics.
WARREN KENDALL BLODGETT, 2d, A.B., Assistant Extension Professor of Rural Engineering.
MARK JOSEPH SMITH, B.S., Assistant Extension Professor of Animal Husbandry.
JOHN HARING VOORHEES, B.S., Assistant Extension Professor of Farm Crops.
LULU GRAVES, Acting Assistant Professor of Home Economics.
HELEN MONSCH, B.S., M.A., Assistant Professor of Home Economics.
GUSTAVE FREDERICK HEUSER, B.S., M.S. in Agr., Assistant Professor of Poultry Husbandry.
WILLIAM IRVING MYERS, B.S., Assistant Professor of Farm Management.
GEORGE WALTER TAILBY, JR., B.S.A., Instructor and Stockman in Animal Husbandry.
JOHN THOMAS LLOYD, A.B., Instructor in Entomology.
EARLE VOLCART HARDENBURG, B.S., M.S. in Agr., Instructor in Farm Crops.
RICHARD ALAN MORDOFF, B.S. in Agr., Instructor in Meteorology.
OLIVER WESLEY DYNES, B.S., M.S. in Agr., Instructor in Farm Crops.
JAMES LEWIS STRAHAN, B.S. in Agr., M.S. in Agr., Instructor in Farm Structures.
ALLAN CAMERON FRASER, B.S., Ph.D., Instructor in Plant Breeding.
LUA ALICE MINNS, B.S., Instructor in Floriculture.
GEORGE CORNELL SUPPLEE, M.S.A., Instructor in Dairy Industry.
DEVOE MEADE, B.S., Instructor in Animal Husbandry.
WINFRED ENOS AYRES, Extension Instructor in Dairy Industry.
LEWIS MERWIN HURD, Extension Instructor in Poultry Husbandry.
ALBERT REIFF BECHTEL, B.S., A.M., Instructor in Botany.
JAMES MARSHALL BRANNON, B.A., M.A., Instructor in Botany.
FRANK BURKETT WANN, A.B., Instructor in Botany.
CLARA LOUISE GARRETT, B.S., Instructor in Drawing.
CLARENCE VERNON NOBLE, B.S., Instructor in Farm Management..
CHARLES PARSONS CLARK, B.S., Extension Instructor in Farm Management.
ANNA JANE HANCY, A.B., M.A., Instructor in Botany.
WALTER GERNET KRUM, Extension Instructor in Poultry Husbandry.
HOWARD CAMPBELL JACKSON, B.S., Instructor in Dairy Industry.
JULIA GLEASON, Instructor in Home Economics.
WINIFRED MOSES, B.S. Instructor in Home Economics.

EDWINA MARIA SMILEY, A.B., Instructor in Plant Pathology.
GEORGE CLAYTON DUTTON, Extension Instructor in Dairy Industry.
BENJAMIN PERCY YOUNG, B.S., Instructor in Entomology.
PETER WALTER CLAASSEN, M.A., Instructor in Biology.
ROY GLEN WIGGANS, B.S.A., M.S.A., Instructor in Farm Crops.
FRANK PORES BUSSELL, B.A., Extension Instructor in Plant Breeding.
ROY LEWIS GILLET, B.S., Instructor in Farm Management.
Mrs. JESSIE AUSTIN BOYS, B.S., Instructor in Home Economics.
CHARLES CHUPP, A.B., Ph.D., Extension Instructor in Plant Pathology.
BENJAMIN DUNBAR WILSON, M.S., Instructor and Analyst in Soil Technology.
GERTRUDE ELIZABETH DOUGLAS, A.B., A.M., Ph.D., Instructor in Botany.
JOHN PHINEUS BENSON, B.S., Instructor in Botany.
RALPH SIMPSON NANZ, B.S., Instructor in Botany.
GLADYS ELIZABETH SMITH, B.S., Instructor in Home Economics.
PAUL BERWIG SCHUMM, M.L.D., Instructor in Landscape Art.
FRANCES REMINGTON KELLEY, B.A., Instructor in Home Economics.
NANCY HILL MCNEAL, Ph.B., Extension Instructor in Home Economics.
WALTER SPRAGUE FROST, B.S., Extension Instructor in Agricultural Chemistry.
VICTOR FERDINAND TAPKE, B.S., Extension Instructor in Plant Pathology.
JOSEPH PULLMAN PORTER, B.S., Instructor in Landscape Art.
LAWRENCE PAUL WEHRLE, B.S., M.S., Extension Instructor in Entomology.
ROBERT BIER, B.S., Extension Instructor in Vegetable Crops.
ERNEST CHARLES YOUNG, B.S., Instructor in Farm Management.
ALICE MAY BLINN, B.S., Extension Instructor in Home Economics.
CHARLES LORING ALLEN, B.A., Instructor in Animal Husbandry.
GEORGE HAINES, B.S., Instructor in Animal Husbandry.
RALPH WALDO EMERSON COWAN, B.S., Instructor in Dairy Industry.
WALTER HOUSLEY WELLHOUSE, M.A., Instructor in Entomology.
FRANK LATTA FAIRBANKS, M.E., Instructor in Farm Mechanics.
JOSEPH BRACKIN KIRKLAND, B.S., Instructor in Farm Practice.
J. NORMA ANDERSON, B.S., Instructor in Plant Pathology.
ERFORD LYNN BANNER, B.S., Instructor in Poultry Husbandry.
HAROLD EUGENE BOTSFORD, B.S., Extension Instructor in Poultry Husbandry.
ALICE VAN SCOY CRANDALL, Extension Instructor in Home Economics.
WILLIAM PRINGLE ALEXANDER, Instructor in Entomology.
PAUL ANDREW DOWNS, Instructor in Dairy Industry.
CHARLES R. STEVENSON, B.S., Instructor in Plant Pathology.
IRVIN H. VOGEL, Extension Instructor in Plant Pathology.
THERESA ELIZABETH SCHINDLER, B.A., M.S., Instructor in Floriculture.
ERNEST GUSTAF ANDERSON, B.Sc.A., Instructor in Plant Breeding.
C. G. MILLS, Extension Instructor in Rural Engineering.
W. T. M. FORBES, Instructor in Biology.
EARL GIBSON LUKENS, A.B., Instructor in Animal Husbandry.
CLARIBEL NYE, B.S., Instructor in Home Economics.
ROBERT CARROLL OGLE, Extension Instructor in Poultry Husbandry.
MAUDE EMILY SANFORD, B.S., Instructor in Home Economics.
HARRY P. YOUNG, B.S., Instructor in Farm Management.
MARION HOUSER BANKS, B.S., Extension Instructor in Farm Mechanics.

- EMMONS WILLIAM LELAND, B.S.A., Superintendent of Field Experiments in Soil Technology.
- RODNEY WESSON PEASE, Instructor in Extension Service.
- IVAN WRIGHT, A.B., M.S., Instructor in Rural Economy.
- CHARLES EDWARD HUNN, Assistant in Plant Propagation.
- RAYMOND STRATTON SMITH, B.S., B.S. in Agr., M.S., Assistant in Soil Technology.
- THOMAS LYSONS MARTIN, B.A., Assistant in Soil Technology.
- ELEANOR HILLHOUSE, B.S., Assistant in Home Economics.
- HELEN SEAMAN, A.B., Assistant in Botany.
- RAYMOND ARNOLD PERRY, B.S., Assistant in Dairy Industry.
- WILLIAM HENRY EYSTER, A.B., A.M., Assistant in Plant Breeding.
- JOHN D. DETWEILER, B.A., M.A., Assistant in Entomology.
- ELLEN EDMONSON, A.B., Assistant in Entomology.
- EMILY EVELETH, B.S., Assistant in Entomology.
- MARK OWENS, B.S., Assistant in Forestry.
- F. C. DEITZ, Assistant in Pomology.
- WILLARD RIEHLMAN BARRETT, Assistant in Chemistry.
- E. M. DRAKE, Assistant in Plant Pathology.
- B. A. JENNINGS, Assistant in Farm Practice.
- H. W. MAYER, JR., Assistant in Forestry.
- JAY R. TRAVER, B.A., Assistant in Entomology.
- GEORGE WHITING WHEELER, M.D., Assistant in Bacteriology.
- WILLIAM SELTZER, Assistant in Soil Technology.
- EARNEST F. CRAMER, B.S., Assistant in Rural Education.
- KATHERINE KOCH, B.S., A.M., Assistant in Landscape Art.
- VENIA LAOTA TARRIS, Assistant in Entomology.
- LEWIS A. EYSTER, A.B., Assistant in Plant Breeding.
- GAIL FERGUSON PUTTICK, Assistant in Plant Breeding.
- HOWARD BUSHNELL ALLEN, B.S.A., Assistant in Rural Education.
- ERNEST F. ARTSCHWAGER, B.S., Ph.D., Assistant in Botany.
- ANNETTE C. DIMOCK, Extension Assistant in Home Economics.
- CUTHBERT B. FRASER, Assistant in Botany.
- CORNELIA LERCH, Student Assistant in Poultry Husbandry.
- HELEN ELIZABETH MURPHY, Assistant in Biology.
- HELEN ALICE PURDY, A.B., Assistant in Plant Pathology.
- FANNIE COOLBAUGH RANE, B.A., Assistant in Botany.
- MILDRED ELIZABETH STRATTON, B.A., Assistant in Botany.
- R. H. THOMAS, Assistant in Rural Education.
- WILLIAM JACK WEAVER, B.S., Assistant in Rural Education.
- DOROTHY WILLISON, Assistant in Agricultural Chemistry.
- BERNARD BELLIS, Assistant in Agricultural Chemistry.
- ARLO BOWLBY CARROLL, Assistant in Vegetable Gardening.
- JOHN COLTON, Student Assistant in Poultry Husbandry.
- JULIAN A. DIMOCK, Assistant in Forestry.
- THOMAS D. HALL, Assistant in Soil Technology.
- LOWELL FITZ RANDOLPH, Ph.B., Assistant in Botany.
- DANE LEWIS BALDWIN, A.B., M.A., Secretary to Dean and Director.
- OLIN WHITNEY SMITH, B.S., Assistant Registrar.
- CLARA FRANCES SYKES, A.B., B.S., Secretary of the Department of Home Economics.
- WILLARD WALDO ELLIS, A.B., LL.B., Librarian.
- GEORGE WILSON PARKER, Executive Assistant.

ADMISSION, TUITION, AND ACADEMIC YEAR

For admission to the College of Agriculture, see page 37.

For tuition in the College of Agriculture, see page 44.

In addition to the two terms into which, in the other colleges of the University, with the exception of the Medical College in New York City, the academic year is divided, the College of Agriculture has provided, and first put into effect in 1914, a third term extending from June through September. The work of the third term is intended for upperclassmen and for graduate students, and no student is allowed to register in the third term if he has not completed the required work of the freshman and of the sophomore year in the College of Agriculture.

THE DEGREE OF BACHELOR OF SCIENCE

The undergraduate instruction for regular students in the College of Agriculture leads to the degree of Bachelor of Science, the requirements for which are residence for eight terms and the completion of one hundred and twenty hours of required and elective work. For the requirements in military science and tactics and in physical culture, see pages 164-165.

Required Subjects. Freshman year: English, course 1, 6 hours; chemistry course 1, 6 hours; biology course 1, 3 hours; zoology, course 1, 6 hours; botany, course 1, 6 hours; the natural history of the farm, course 1, 1 hour; Sophomore year: geology, course 1, 3 hours (optional for students specializing in home economics); physiology, course 3, 10, or 20, 3 to 4 hours; physics, course 2, 5 hours; at least five hours in one of the following: chemistry, mathematics, bacteriology. Junior year: political economy, course 51, 6 hours.

Elective Subjects. The remainder of the required one hundred and twenty hours must consist of subjects elected under the following restrictions:

1. Not more than twenty hours may be taken in courses given in other colleges of the University.

2. In selecting his course after the first year the student must obtain the advice and approval of a professor or an assistant professor preferably in the department in which he expects to specialize, who shall be chosen by the student at the beginning of the sophomore year. Students expecting to specialize in forestry, landscape art, rural education, or home economics must take as their advisers professors or assistant professors in those departments. All students who are preparing for teaching are recommended to consult the Professor of Rural Education as well as their Faculty Adviser before filing their term schedules.

A student who receives twelve or more hours of college credit at entrance, see page 43, may be regarded as having satisfied one of the required terms of residence.

A student who has satisfied the entrance requirements of this College, and has afterward completed in two or more summer sessions in Cornell University at least twelve hours of work in courses approved by the departments concerned, may be regarded as having thus satisfied one term of residence. Under no circumstances shall work done in summer sessions be accepted as the equivalent of more than two terms of residence. The maximum amount of credit toward the degree of Bachelor of Science which is allowed for the work in any one Summer Session is seven hours.

A student admitted to the College of Agriculture from another college in Cornell University, or from any other institution of collegiate rank, will be regarded as having completed the number of terms and hours to which his records entitle him, and will receive all the privileges of students who have completed the same number of terms and hours by residence in the College. In order, however, to obtain the degree of Bachelor of Science, he must have completed the prescribed subjects in the four-year course and the requisite number of

elective hours in agricultural subjects. He must also have been in residence in the College of Agriculture for at least the last two of the required eight terms and must have completed not less than fifteen hours a term, of which two-thirds, at least, must be subjects taught by the staff of the College of Agriculture.

A student must register for at least twelve hours each term, and no new student may register for more than eighteen hours.

All men students except those whose record and registration at the beginning of the senior year show that they are specializing in botany, home economics, forestry, landscape art, or entomology, must fully satisfy, before the beginning of the senior year, the requirement in farm practice. This requirement is the equivalent of a year or more of actual farm work.

Passing grades are designated A, B, C, D, and P. Beginning with the class of 1920 students receiving grade C are to receive normal credit toward graduation; grade B, 10 per cent additional credit; grade A, 20 per cent additional credit; grade D, credit reduced 10 per cent; and grade P, credit reduced 20 per cent. No student may be graduated in less than eight terms unless his work in the College of Agriculture averages 15 per cent excess credit.

Curriculum of Seven Years in Agriculture and Veterinary Medicine

A regular student may be registered in both the College of Agriculture and the New York State Veterinary College with the following restrictions:

1. Completion of all the required work of his course.
2. Credit of ninety hours, none of which is in the Veterinary College.
3. Permission of both the faculties concerned.

Such a student may be recommended for his degree in the College of Agriculture when he has met the following requirements:

1. Completed thirty hours of which not less than twelve shall be taught in the New York State College of Agriculture.
2. Has met both the group and agricultural elective requirements of the College of Agriculture.

On completion of the remaining three years if he meets the requirements of the State Veterinary College, he will receive the degree of doctor of veterinary medicine.

EXTENSION WORK

The chief phases of the extension work of the College of Agriculture, in addition to Farmers' Week held in Ithaca, are special lectures and demonstrations in various parts of the State of New York; farm visits, cooperative experiments, and fair exhibits; the maintenance of traveling schools and of demonstration schools; the conduct of reading courses and the organization of study clubs.

WINTER COURSES

The winter courses are eight in number: 1. Agriculture; 2. Dairy Industry; 3. Poultry Husbandry; 4. Fruit Growing; 5. Home Economics; 6. Flower Growing; 7. Vegetable Gardening; 8. Game Breeding. All the winter courses, except that in Game Breeding, will begin on November 6, 1918, and will close on February 14, 1919. The winter course in Game Breeding will begin on February 17, 1919, and will close on May 9, 1919. The practice period on the game farm is from May 12, 1919, to August 31, 1919.

The minimum age requirement for admission to the winter courses is eighteen years. There are no academic requirements for admission, and no credit toward graduation may be earned in the winter courses.

COURSES OF INSTRUCTION

ELECTIVE COURSES OPEN TO FRESHMEN

Dairy Industry 1, 2, 3, 6, 14; Drawing, 1, 2; Floriculture 9; Forestry 1, 2, 3; Landscape Art 2, 3, 13; Home Economics 2; Meteorology 1; Nature Study 61; Poultry Husbandry 1, 3, 3a, 10; Rural Economy 1; Rural Engineering 3, 4, 20, 30; Farm Crops 11.

AGRICULTURAL CHEMISTRY

See page 84.

ANIMAL HUSBANDRY

1. **Principles and Practice of Feeding Animals.** First or second term, credit two hours. Professor SAVAGE.
2. **Principles of Animal Breeding.** Second term, credit three hours. Professor WING, and Messrs. MEADE and ALLEN.
5. **The Horse.** Second term, credit three hours. Professor HARPER, and Messrs. MEADE and HAINES.
6. **Horse Training, Practical Course.** First term, credit two hours. Prerequisite course 5. Professor HARPER and Mr. HAINES.
7. **Mechanics of the Horse.** First term, credit three hours. Prerequisite course 5. Professor HARPER.
10. **Dairy Cattle.** First term, credit four hours. Professor WING, and Messrs. MEADE and ALLEN.
11. **Beef Cattle, Sheep, and Swine.** First term, credit three hours. Assistant Professor SEULKE and assistants.
12. **Meat and Meat Products.** First or second term, credit three hours. Assistant Professor SEULKE. One required inspection trip to Buffalo and vicinity.
13. **Beef Cattle, Sheep, and Swine, Advanced Course.** Second term, credit two hours. Prerequisite course 11. Assistant Professor SEULKE and assistants.
14. **The Microscopic Study of Feeds for Animals.** Second term, credit two hours. For advanced and graduate students.
15. **Principles of Feeding, Advanced Course.** Second term, credit two hours. Prerequisite course 1 and Veterinary Physiology 12. For advanced and graduate students. Professor SAVAGE.
16. **Principles of Animal Genetics, Advanced Course.** Second term, credit two hours. Mr. MEADE.
17. **Advanced Stock Judging.** First and second terms, credit one hour a term. Professors WING, HARPER, SAVAGE, HOPPER, and assistants.
18. **Seminary.** First and second terms, without credit. Required of all graduate students taking either a major or a minor subject in the Department. Advanced undergraduates will be admitted by permission, and if a satisfactory thesis on an approved subject is presented may receive not to exceed two hours credit. Departmental staff.
20. **General Elementary Course in Animal Husbandry.** For students in the New York State Veterinary College only. Throughout the year, credit three hours each term. Professors WING, HARPER, and SAVAGE.
30. **Health and Disease of Animals.** First term, credit three hours. Professors MOORE and WILLIAMS.
31. **Horseshoeing.** Second term, credit one hour. Open to seniors. Professor ASMUS.

BOTANY

1. **General Botany.** First and second terms, credit three hours a term. Professor SCHRAMM, Misses HANCY, DOUGLAS, SEAMAN, and RANE, Mr. CLARK, and others. Laboratory fee, \$2.50 a term; deposit, \$2, for first term only.
2. **Forest Botany.** First term, credit three hours. Prerequisite course 1 or its equivalent. Mr. BECHTEL. Laboratory fee, \$3; deposit, \$2.
4. **Microscopic Wood Technology.** First term, credit two hours. Prerequisite courses 1 and 2 or an equivalent. Assistant Professor EAMES. Laboratory fee, \$4.
5. **Grasses.** Second term, credit two hours. Prerequisite course 1 or its equivalent. Professor WIEGAND and assistant. Laboratory fee, \$2.
6. **Taxonomy of the Higher Plants.** Second or third term, credit four hours. Prerequisite course 1 or its equivalent. Professor WIEGAND, Mr. BECHTEL, and assistants. Laboratory fee, \$4; deposit, \$2.
- 6a. **Advanced Field Course in Taxonomy.** Third term, credit four hours. Prerequisite course 6 or its equivalent. Professor WIEGAND and Mr. BECHTEL. Laboratory fee, \$4; deposit, \$2.
7. **Weeds and Weed Seeds.** Third term, credit two hours. Prerequisite course 1 or its equivalent. Professor WIEGAND and Mr. BECHTEL. Laboratory fee, \$2.

9. **Histology.** First or third term, credit four hours. Prerequisite course 1 or its equivalent. Assistant Professor EAMES and assistant. Laboratory fee, \$5.
10. **Cytology.** Second term, credit four hours. Prerequisite course 1 or its equivalent. Assistant Professor SHARP and assistant. Laboratory fee, \$4.
11. **Methods in Histology and Cytology.** First term, credit three hours. Prerequisite course 1 or its equivalent. Assistant Professors EAMES and SHARP, and Mr. WANN. Laboratory fee, \$5.
12. **Comparative Morphology of Algæ.** Second term, credit four hours. Prerequisite course 1 or its equivalent. Professor SCHRAMM. Laboratory fee, \$5.
13. **Comparative Morphology of Bryophytes and Pteridophytes.** First term, credit four hours. Prerequisite course 1 or its equivalent. Assistant Professor SHARP and assistant. Laboratory fee, \$5.
14. **Comparative Morphology of Spermatophytes.** Second term, credit four hours. Prerequisite course 1 or its equivalent, and course 13. Assistant Professor SHARP and assistant. Laboratory fee, \$5.
15. **Comparative Morphology of Fungi.** First term, credit two hours. Prerequisite course 1 or its equivalent. Professor SCHRAMM. Laboratory fee, \$2.50.
20. **Plant Physiology.** First or second term, credit four hours. Prerequisite all freshman work or its equivalent, and course 1. This course may be taken to satisfy the requirement in physiology. Professor KNUDSON, Assistant Professor CURTIS, and Messrs. BRANNON, BENSON, NANZ, and others. Laboratory fee, \$4; breakage fee, \$2.
21. **Plant Physiology, Advanced Lecture Course.** First and second terms, credit three hours a term. Prerequisite training in botany and chemistry, to be determined in each case by the Department; recommended for seniors and graduate students. Professor KNUDSON and Assistant Professor CURTIS.
- 21a. **Plant Physiology, Advanced Lecture Course.** Third term, credit four hours. Prerequisite as in course 21. Professor KNUDSON or Assistant Professor CURTIS.
22. **Plant Physiology, Advanced Laboratory Course.** First and second terms, credit three hours a term. Must be preceded or accompanied by course 21. Professor KNUDSON, Assistant Professor CURTIS, and Mr. BRANNON. Laboratory fee, \$5; breakage deposit, \$2.
- 22a. **Plant Physiology, Advanced Laboratory Course.** Third term, credit six hours. Requirements as in course 22. Professor KNUDSON or Assistant Professor CURTIS. Laboratory fee, \$10; breakage deposit, \$5.
- [26. **Physiology of Fermentation.** First term, credit three hours. Prerequisite required work through the sophomore year, bacteriology, and course 20 or 21.] Not given in 1918-1919. Laboratory fee, \$5.

Courses intended primarily for graduates

18. **Research in General Botany, Taxonomy, Histology, Cytology, and Algæ.** Throughout the year, credit not less than three hours a term. Professors WIEGAND and SCHRAMM, Assistant Professors EAMES and SHARP. For graduates and advanced students.
19. **Seminary in Taxonomy, Morphology, Cytology, and Histology.** Throughout the year. Required of graduate students in these subjects. Assistant Professors SHARP and EAMES, assisted by other members of the Department.
30. **Special Chapters in Metabolism.** Third term, credit one hour or more. Professor KNUDSON. Open only to graduates, or to undergraduates who have had course 21 and organic chemistry.
31. **Seminary in Plant Physiology.** Throughout the year, credit one hour a term. Limited to graduates taking work in the Department. Professor KNUDSON and Assistant Professor CURTIS.
33. **Research, Plant Physiology.** Throughout the year, credit for major or minor, otherwise not less than four hours a term. Prerequisite adequate training in botany, chemistry, and physiology. Professor KNUDSON and Assistant Professor CURTIS.

DAIRY INDUSTRY

1. **Milk Composition and Tests.** First or second term, credit three hours. For regular students only. Professor TROY, Assistant Professor MCINERNEY, and assistants. Laboratory deposit, \$3, part returnable.
2. **Butter.** First or second term, credit three hours. Must be preceded or accompanied by courses 1 and 6; for regular students only. Professor GUTHRIE and Mr. JACKSON. Laboratory deposit, \$4, part returnable.
3. **Cheese.** First term, credit four hours. Prerequisite courses 1 and 6; should be preceded or accompanied by course 8. Assistant Professor FISK and assistant. Laboratory deposit, \$2.50, part returnable.
4. **Bacteriology, Elementary Course.** First term, credit four hours. For regular students only, except by special permission. Professor STOCKING, and Messrs. SUPPLEE and WHITING. Laboratory deposit, \$4, part returnable.
6. **Market Milk and Milk Inspection.** Second term, credit four hours. Must be preceded or accompanied by course 1; should be preceded or accompanied by courses 4 and 8. Professor ROSS. Laboratory deposit, \$3, part returnable.

7. **Testing and Composition of Dairy Products, Advanced Course.** Second term, credit two hours. Prerequisite course 1; should be preceded by Chemistry 6; not open to first- and second-year students except by special permission. Professor TROY, Assistant Professor MCINERNEY, and assistants. Laboratory deposit, \$5, part returnable.

8. **Dairy Bacteriology.** Second term, credit four hours. Must be preceded or accompanied by course 1, and preceded by course 4 or its equivalent; open to regular students only. Professor STOCKING, and Messrs. SUPPLEE and WHITING. Laboratory deposit, \$4, part returnable.

9. **Butter, Advanced Course.** Second term, credit two hours. Must be preceded by a good record in course 2. Professor GUTHRIE and Mr. JACKSON. Laboratory deposit, \$4, part returnable.

10. **Fancy Cheese.** Second term, credit two hours. Prerequisite courses 1 and 3. Assistant Professor FISK and Mr. COWAN. Laboratory deposit, \$2, part returnable.

11. **Ice Cream.** Second term, credit two hours. Prerequisite courses 1 and 14 or their equivalent. Assistant Professor FISK and Mr. COWAN. Laboratory deposit, \$2, part returnable.

12. **Seminary.** First or second term, credit one hour. For advanced students; required of graduate students taking work in the Department. Professors STOCKING, ROSS, TROY, and GUTHRIE, and Assistant Professors FISK and MCINERNEY.

13. **Research.** First or second term, credit one or more hours, by arrangement. For advanced students. Professors STOCKING, ROSS, TROY, and GUTHRIE, and Assistant Professors FISK and MCINERNEY. Laboratory deposit, \$2 for each credit hour, part returnable.

14. **General Agricultural Bacteriology.** First term, credit three hours. Professor STOCKING, and Messrs. SUPPLEE and WHITING. Laboratory deposit, \$4, part returnable.

15. **Bacteriology for the Home.** Second term, credit three hours. Messrs. SUPPLEE and WHITING. Laboratory deposit, \$4, part returnable.

19. **Cheddar Cheese, Advanced Course.** Second term, credit two hours. Prerequisite a good record in course 3. Assistant Professor FISK. Laboratory deposit, \$2, part returnable.

DRAWING

1. **Mechanical Drawing.** First or second term, credit three hours. Assistant Professor REYNA.

2. **Free-hand Drawing.** First and second terms, credit two or more hours a term. Students may not enter the second term unless they have taken the course in the first term, or its equivalent. First term: Professor BAKER and Miss GARRETT. Second term: Miss GARRETT.

2a. **Free-hand Drawing and Outdoor Sketching.** Third term, credit from two to five hours. Prerequisite course 2 or its equivalent. Professor BAKER.

3. **Free-hand Drawing, Advanced Course.** First or second term, credit two or more hours. Prerequisite course 2 or its equivalent. Professor BAKER and Miss GARRETT. Second term. Miss GARRETT.

4. **Perspective.** Second term, credit two hours. Prerequisite course 2 or its equivalent, and descriptive geometry. For students in landscape art. Assistant Professor REYNA.

5. **Pictures and Their Making.** First term, without credit. Open to all who are interested. Professor BAKER.

ENTOMOLOGY, LIMNOLOGY, AND ORNITHOLOGY

Biology

1. **General Biology.** Second term, credit three hours. Botany 1 and Zoology 1 or the equivalent must precede or accompany this course. Professor NEEDHAM, Mr. CLAASSEN, and assistants. Laboratory fee, \$2.50.

1a. **General Biology.** First or second term, credit three hours. May be offered as a prerequisite for course 1. Laboratory fee, \$2.50.

Introductory Entomology

1. See Biology, course 1.

2. **The Ecology of Insects.** Third term, credit three hours. Professor NEEDHAM and assistant.

3. **General Entomology.** First, second, and third terms, credit three hours a term. Work of the first term repeated in the third term. Prerequisite course 1 or Zoology 1. Professor HER-RICK, Assistant Professor MATHESON, and Messrs. WELLHOUSE and DETWEILER. Laboratory fee, \$3.

4. **Elementary Morphology of Insects.** First, second, or third term, credit three hours. Professor JOHANNSEN, Mr. YOUNG, and Miss EDMONSON. Laboratory fee, \$2.

5. **Elementary Systematic Entomology.** First, second, or third term, credit two hours. Prerequisite course 4. Assistant Professor BRADLEY, Mr. YOUNG, and assistant.

Courses 4 and 5 are introductory laboratory courses required of all students who plan to take advanced work in entomology. Laboratory fee, \$2.

Apiculture

[9. **General Beekeeping.** Second or third term, credit three hours. Prerequisite first term of course 3. Assistant Professor KING.] Not given in 1918-19. Laboratory fee, \$2.

Systematic Entomology

10. **Entomotaxy.** Third term, credit two or three hours. Assistant Professor BRADLEY and assistant. Laboratory fee, \$3.
11. **Advanced Systematic Entomology.** First term, credit three or more hours. Prerequisite course 5. Assistant Professor BRADLEY and assistant. Laboratory fee, \$6.
12. **Taxonomy of Insects.** Throughout the year, credit four hours a term. Prerequisite courses 3, 4, 5, 11, 14, and 20, and preferably 10. Professors NEEDHAM and JOHANNSEN, Assistant Professors BRADLEY and MATHESON, and cooperating specialists.
- D. **Lepidoptera.** First term, 1918-1919. Dr. FORBES.
- E. **Diptera.** Second term, 1918-1919. Professor JOHANNSEN.
- F. **Neuropteroids.** Third term, 1919. Professor NEEDHAM.
- [G. **Hymenoptera.** First term, 1919-1920. Assistant Professor BRADLEY.]
- [H. **Orthoptera.** Second term, 1919-1920.]
13. **Classification of the Coccidæ.** First term, credit two hours. Prerequisite courses 4, 5, and 11. Assistant Professor BRADLEY. Laboratory fee, \$3.
14. **Entomological Literature and its Technics.** First term, credit three hours. Prerequisite course 3 or 5 or Zoology 5. Assistant Professor BRADLEY.
19. **Research in Systematic Entomology.** Throughout the year, credit three or more hours a term. Prerequisite courses 3, 10, 11, 14, 20, and one term of course 12. Assistant Professor BRADLEY, and Professors NEEDHAM and JOHANNSEN. Laboratory fee, 50 cents a credit hour.

Insect Morphology

20. **Morphology and Development of Insects.** First and second terms, credit two hours a term. Prerequisite courses 3 (first term), 4, and 5. Laboratory work to accompany or follow this course is offered under course 21. Professor JOHANNSEN.
21. **Histology of Insects.** First or second term, credit three or more hours. Prerequisite courses 3 (first term), 4, 5, and 20. Professor JOHANNSEN. A laboratory course to accompany or follow the first term of course 20. Laboratory fee, \$1.50 a credit hour.
29. **Research in Morphology of Insects.** Throughout the year, credit three or more hours a term. Prerequisite courses 3, 4, and 5. Professors JOHANNSEN and NEEDHAM. Laboratory fee, \$1.50 a credit hour.

Economic Entomology

30. **Parasites and Parasitism.** First term, credit two hours. Prerequisite course 3. Assistant Professor MATHESON and Mr. MUESEBECK. Laboratory fee, \$2.
31. **Relations of Insects to Disease.** Second term, credit two hours. Prerequisite first term of course 3 or 30. Professor JOHANNSEN. Laboratory fee, \$2.
40. **Advanced Economic Entomology and Insectary Methods.** Third term, three hours. Open only to graduates. Assistant Professor MATHESON. Laboratory fee, \$2.50.
41. **Forest Insects.** Second term, credit two hours. Prerequisite first term of course 3. Professor HERRICK.
49. **Research in Economic Entomology.** Throughout the year, credit three or more hours a term. Prerequisite courses 3, 4, and 5. Professor HERRICK, Assistant Professor MATHESON, and Mr. MUESEBECK.

Limnology

50. **General Limnology.** Second or third term, credit three hours. Open only to students who have taken or are taking courses 1 and 3, or the equivalent. Professor NEEDHAM and Mr. LLOYD. Laboratory fee, \$2.50.
51. **Aquiculture.** Second term, credit two hours. Assistant Professor EMBODY.
52. **Fish Culture.** First and second terms, credit one or two hours a term. Must be preceded or accompanied by course 51. Assistant Professor EMBODY. May be taken either one or two terms. Laboratory fee, \$1.50 a credit hour.
53. **Plancton.** Second and third terms, credit one hour a term. Prerequisite permission to register. Professor JOHANNSEN and Mr. LLOYD. Laboratory fee, \$1.50.
58. **Research in Aquiculture.** Throughout the year, credit three or more hours a term. Prerequisite courses 50, 51, and 52. Assistant Professor EMBODY.
59. **Research in Limnology.** Throughout the year, credit three or more hours a term. Prerequisite course 50 or its equivalent. Professor NEEDHAM and Assistant Professor EMBODY.

Seminaries

Seminary. Throughout the year.

Ornithology

6. **Field Ornithology.** Second term, credit three hours. Assistant Professor ALLEN and assistant. Laboratory fee, \$2.
- [9. **Advanced Ornithology.** First term, credit three hours. Prerequisite course 6 or Zoology 5. Assistant Professor ALLEN.] Not given in 1918-1919. Laboratory fee, \$2.

11. Economic Ornithology and Mammalogy. First term, credit three hours. Should be preceded by Zoology 5; presupposes an elementary knowledge of botany and entomology. Assistant Professor ALLEN and assistants. Laboratory fee, \$2.

EXTENSION TEACHING

1. Extension Work. First term, credit two hours. Open to juniors and seniors, and to others by arrangement. Public Speaking I should precede this course. Professors EVERETT and WHEELER, Assistant Professor GILKEY, and assistants.

2. Extension Work. Second term, credit two hours. Prerequisite course 1, of which course 2 is a continuation. Professors EVERETT and WHEELER, Assistant Professor GILKEY, and assistants.

3. Extension Work, Advanced Course. First term, credit one hour. Prerequisite courses 1 and 2, or the equivalent. Professors WHEELER and CROSBY.

4. Seminary. Second term, without credit. Open to graduate students and others by special permission. Professors CROSBY and WHEELER, and Assistant Professor ROBINSON.

THE NATURAL HISTORY OF THE FARM

1. The Natural History of the Farm. First or second term, credit one hour. Professor NEEDHAM, Assistant Professor EMBODY, Mr. ALEXANDER, and assistants. Fee, \$2.

FARM CROPS

1. Cereals, Forage Crops, and Miscellaneous Crops. First or second term, credit four hours. To be preceded or accompanied by Soils 1 or 2 and Botany 1. Mr. DYNES. Laboratory fee, \$2.

2. Farm Crops, Advanced Course. First or third term, credit three hours. Prerequisite course 1. Professor MONTGOMERY.

4. Special Cash Crops. First or second term, credit three hours. To be preceded or accompanied by course 1 and Botany 1. Mr. HARDENBURG. Laboratory fee, \$2.

5. Seminary. First term, without credit. Required of graduate students. Professor MONTGOMERY.

6. Research. Throughout the year. Two or more hours a term. Prerequisite permission to register. Limited to graduate students. Professor MONTGOMERY.

Division of Vegetable Gardening

11. Commercial Vegetable Gardening. First or second term, credit four hours. Prerequisite Botany 1. Must be preceded or accompanied by Soils 1. Laboratory fee, \$2.

12. Commercial Vegetable Gardening. Second term, credit three hours. Prerequisite course 11. Laboratory fee, \$2.

13. Home Vegetable Gardening. Second term, credit three hours. Assistant Professor SCHNECK. Students will not be given credit for both course 11 and course 13. Laboratory fee, \$2.

14. Vegetable Forcing. Second term, credit three hours. Must be preceded or accompanied by course 11 and Floriculture 2. Assistant Professor SCHNECK. Laboratory fee, \$2.

15. Preservation of Perishable Crops. First term, credit two hours. Must be preceded or accompanied by course 11 and Dairy Industry 4. Laboratory deposit, \$5.

FARM MANAGEMENT

1. Farm Cost Accounting. First term, credit three hours. Open to juniors and seniors who have passed the farm practice examination. Should precede course 2. Professor WARREN and Assistant Professor MISNER. Laboratory fee, \$2.

2. Farm Management. Second term, credit four hours. Open to juniors and seniors who have passed the farm practice examination. Should be preceded or accompanied by course 1, economics, and as many as possible of the subjects dealing with the production of crops and animals. Professor LIVERMORE and Mr. NOBLE. Laboratory fee, \$2.

Advanced and Graduate Courses

3. Farm Organization. First term, credit three hours. Prerequisite permission to register and courses 1 and 2. No undergraduate will be admitted to this course who has not made an unusually good record in courses 1 and 2. Professor LIVERMORE and Mr. NOBLE. Expenses for trips are estimated to be about \$15.

4. Types of Farming in the United States. Second term, credit two hours. Prerequisite course 2. Professor WARREN and assistants.

5. Seminary. Second term, credit one hour. Open only to graduate students. Professors WARREN and LIVERMORE, and Assistant Professor SCOVILLE.

6. Agricultural Statistics. First term, credit two hours. Prerequisite permission to register. Professor WARREN.

7. Food Problems. Second term, credit two hours. Prerequisite permission to register. Professor WARREN and assistant.

8. Teachers' Course. Third term, credit four to six hours. This course will include the work given in courses 1, 2, and 3.

9. **Research.** Throughout the year, credit one or more hours a term. Prerequisite permission to register. First and second terms, Professors WARREN and LIVERMORE; third term, Assistant Professor MISNER.

FARM PRACTICE

1. **Farm Practice.** First and second terms, without credit toward graduation, but gives 2 to 5 points toward the farm practice requirement, depending on the quality of the work done.

FLORICULTURE

1. **Principles and Methods of Greenhouse Practice.** First term, credit three hours. Prerequisite Botany 1. Professor WHITE and Miss MINNS. Laboratory fee, \$2.50.

2. **Greenhouse Construction.** Second term, credit three hours. Assistant Professor LUMSDEN. Laboratory fee, \$1.

3. **Commercial Floriculture.** First term, credit four hours. Prerequisite courses 1 and 2, Botany 1 and 20, and Soils 1. Professor WHITE. Laboratory fee, \$2.

4. **Commercial Floriculture.** Second or third term, credit four hours. Prerequisite course 3. Professor WHITE and Assistant Professor LUMSDEN. Laboratory fee, \$2.

6. **Floral Arrangement.** Second term, credit one hour. Registration is limited to fifteen students. Professor WHITE and Miss MINNS. Laboratory fee, \$3.50.

7. **Conservatory Plants.** Second and third terms, credit two hours. Prerequisite course 1. Assistant Professor LUMSDEN. This course should be preceded or accompanied by courses 2 and 3. Fee, \$1.

8. **Garden Flowers.** Second or third term, credit three hours. Prerequisite Botany 1; Botany 8 recommended. Assistant Professor LUMSDEN and Miss MINNS. Laboratory fee, \$2.

8a. **Grouping and Arrangement of Annuals and Herbaceous Perennials.** Second or third term, credit two hours. Prerequisite course 8. Assistant Professor LUMSDEN. Laboratory fee, \$2.

9. **Amateur Floriculture.** First, second, or third term, credit three hours. Miss MINNS. Laboratory fee, \$2.

11. **The History and Literature of Floriculture.** Second term, credit two hours. Designed primarily for seniors and graduate students. Professor BEAL.

12. **Investigation in Floriculture.** Throughout the year, credit, one, two, or three hours a term. Prerequisite courses 1, 3, and 4, and permission to register. Designed primarily for upper-classmen and graduate students. Professors WHITE and BEAL, and Assistant Professor LUMSDEN.

13. **Seminary.** Throughout the year. One hour a term. Required of advanced students who elect course 12, and of all graduate students. Professor WHITE and members of the staff.

FORESTRY •

Courses intended primarily for students who do not expect to make forestry their major work. Standing as professional forestry students may not be gained by taking courses 1-5

1. **The Farm Woodlot.** First or second term, credit two hours. Assistant Professor COLLINGWOOD. Laboratory fee, 50 cents.

Students expecting to take courses 2 and 3 should not elect course 1, as the ground covered in course 1 is repeated in courses 2 and 3.

2. **Elements of Forestry: Mensuration and Management.** Second term, credit three hours. Professors BENTLEY and RECKNAGEL. Laboratory fee, \$1.

3. **Elements of Forestry: Silviculture.** First term, credit three hours. Professor HOSMER. Laboratory fee, \$1.

4. **Elements of Forestry: Forest Utilization.** First term, credit two hours. Professor RECKNAGEL.

5. **Conservation of Natural Resources.** First term, credit two hours. Professor ADAMS.

Courses intended both for professional forestry students and for students in other lines

6. **The Field of Forestry.** Second term, credit two hours. Professor SPRING.

8. **Wood Technology.** First term, credit three hours. Professor RECKNAGEL. Laboratory fee, \$1.

Courses intended primarily for professional forestry students

Professional forestry students should not elect courses 1, 2, 3, and 4, as the following required professional courses cover the same ground in greater detail.

9. **Forest Utilization.** Third term, credit four hours. Professor BENTLEY.

10. **Forest Engineering.** Second term, credit two hours. Prerequisite plane trigonometry and one course in surveying. Professors BENTLEY and RECKNAGEL.

11. **Forest Mensuration.** Third term, credit five hours. Professor BENTLEY. Laboratory fee, \$1.50.

13. **Timber Trees and Forest Regions.** Second term, credit three hours. Professors BENTLEY and RECKNAGEL. Laboratory fee, \$1.

14. **Silviculture: Forest Ecology.** First six weeks of third term, credit three hours. Open only to professional forestry students. Prerequisite course 13 and Botany 2 or their equivalents. Professor SPRING. Laboratory fee, 50 cents.

15. **Silviculture: Natural Reproduction and Care of the Forest.** Beginning the seventh week of the third term, credit three hours. Prerequisite courses 13 and 14. Professor SPRING. Laboratory fee, 50 cents.

16. **Silviculture: Forest Planting and the Forest Nursery.** Second term, credit three hours. Professor SPRING. Laboratory fee, \$1.50.

18. **Forest Protection.** Second term, credit two hours. Open only to professional forestry students. Professor HOSMER.

19. **Forest Policy, Forest Law, and History of Forestry.** Second term, credit three hours. Professor HOSMER.

Course 19 should not be elected by others than professional forestry students, unless they have had courses 2 and 3, or course 6.

20. **Forest Management: a. Forest Organization.** Third term, credit three hours. Open only to graduate students. Professors SPRING and BENTLEY.

b. **Forest Finance.** First term, credit two hours. Professor RECKNAGEL.

21. **Forest Administration.** First term, credit two hours. Prerequisite course 20. Professor RECKNAGEL.

22. **Seminary.** First and third terms. Two hours a term. Open only to graduate students. Professors HOSMER, SPRING, RECKNAGEL, and BENTLEY, and Assistant Professors CHANDLER and COLLINGWOOD.

23. **Advanced Work.** Throughout the year, credit two or more hours a term. Open to undergraduate and graduate students who have had the necessary training. Professors HOSMER, SPRING, RECKNAGEL, and BENTLEY, and Assistant Professors CHANDLER and COLLINGWOOD.

24. **Research.** Throughout the year. Three or more hours a term. Open only to graduate students. Professors HOSMER, SPRING, RECKNAGEL, and BENTLEY, and Assistant Professors CHANDLER and COLLINGWOOD.

HOME ECONOMICS

1. **Foods and Nutrition, Survey Course.** First term, credit three or five hours. May be taken in any year. Professor ROSE and Miss KELLEY. Laboratory fee, \$10.

2. **Supervised Study.** First term, credit one hour. Open only to freshmen in home economics and required of them. Assistant Professor HAZARD.

2a. **Elementary Sewing and Handicraft; Elementary Cookery.** Second term, credit in sewing one hour, credit in cookery one hour. This course or its equivalent is required of all home economics students. Assistant Professors WARNER and HENRY, Misses GLEASON and KELLEY, and Mrs. BOYS. The work of this course is preparatory to course 3. Laboratory fee, \$2.

3. **An Introductory Course in Foods.** First and second terms; credit, first term, five hours, second term, four hours. Prerequisite Biology 1 and Chemistry 1. Chemistry 83, 92, and 93 must precede or accompany this course, which should be taken in the sophomore year. First term, Assistant Professor HENRY and Mrs. BOYS; second term, Mrs. BOYS and Miss SMITH. Laboratory fee, \$15 each term, part returnable.

4. **Household Sanitation.** First term, credit one hour. Should be preceded or accompanied by Dairy Industry 15 and Physics 1, and must be taken with Physical Education 11. Required of seniors in home economics. Miss KELLEY.

5. **Institution Management: Equipment and Organization.** Second term, credit three hours. Prerequisite courses 3, 5b, 5c, and 6, or the equivalent. Should be taken in the senior year.

5a. **Institution Management: Survey Course.** Second term, credit two hours. Laboratory fee, \$2.

5b. **Institution Management: Large Quantity Cooking.** First term, credit two hours. Laboratory fee, \$1.

5c. **Institution Management: Institution Buying.** Second term, credit two hours. Laboratory fee, \$2.

6. **Dietetics.** Second term, credit five hours. Prerequisite course 3, Chemistry 83, and Biochemistry 14; should be taken in the junior year. Professor ROSE, Assistant Professor HENRY, and Miss SMITH. Laboratory fee, \$10, part returnable.

7. **Foods and Nutrition, Survey Course.** First term, credit three or four hours. Professor ROSE and Miss KELLEY. Laboratory fee, \$5.

8. **Design.** First and second terms, credit three hours a term. To be taken in the junior year. Assistant Professor WARNER. Laboratory fee, \$4 a term.

9. **Design, Advanced Course.** Second term, credit two hours. Prerequisite course 8. Assistant Professor WARNER. Laboratory fee, \$3.

10. **The House.** First and second terms, credit two hours a term. Should be accompanied by course 8. Assistant Professor YOUNG. Laboratory fee, \$1 a term.

12. **Woman and the Family.** Second term, credit three hours. Professor VAN RENSSELAER and Assistant Professor HAZARD.

13. **Women in Industry.** First term, credit three hours. Assistant Professor HAZARD.

13a. **Welfare Supervision of Women in Industry.** Second term, credit three hours. Prerequisite course 13. Assistant Professor HAZARD.

14. **Household Management.** First term, credit three hours. Prerequisite Political Science 51. Required of seniors in home economics. Professor VAN RENSSELAER and Miss KELLEY. Laboratory fee, \$5.

14a. **Household Management: Apartment Problem.** Second term, credit one hour. Prerequisite courses 3, 6, and 14. Required of seniors in home economics. Professor VAN RENSSELAER and Miss KELLEY. Laboratory fee, \$10.

15. **Introductory Course in Clothing and Textiles.** First or second term, credit three hours. Required of all home economics students. Misses GLEASON and HILLHOUSE. Estimated expense, approximately \$12 to \$15. Laboratory fee, \$3.

15a. **Garment Construction.** Second term, credit three hours. Prerequisite course 15. Assistant Professor BLACKMORE and Miss GLEASON. Estimated expense, \$5 to \$10. Laboratory fee, \$3.

16. **Draping, Drafting, Designing, and Dressmaking.** First term, credit three hours. Prerequisite courses 15 and 15a. Assistant Professor BLACKMORE and Miss HILLHOUSE. Estimated expense, \$8 to \$10. Laboratory fee, \$3.

17. **Selection, Design, and Technique of Clothing.** Second term, credit two hours. Prerequisite courses 8, 15, 15a, and 16. The second term of course 8, costume design, should be taken parallel to course 17. Assistant Professor BLACKMORE and Miss GLEASON. Estimated expense, from \$15 to \$20. Laboratory fee, \$2.

18. **Millinery.** First or second term; first term, credit two hours, second term, credit one or two hours. Prerequisite course 15. Required of all students specializing in clothing and textiles. Miss HILLHOUSE. Estimated expense, from \$6 to \$10. Laboratory fee, \$2 for one hour credit, \$3 for two hours credit.

19. **Textiles.** First term, credit two hours. Required of students specializing in textiles and clothing and of students working for certificates for teaching general home economics. Assistant Professor BLACKMORE. Estimated expense, \$5. Fee, \$2.

20. **Special Problems.** First and second terms, credit and hours by arrangement. Prerequisite a fundamental knowledge of home economics. Open to seniors and graduate students in home economics, and to other qualified persons by special arrangement.

21. **Advanced Cookery.** First term, credit one hour. Prerequisite course 3. Mrs. BOYS. Laboratory fee, \$5.

21a. **Experimental Cookery.** First and second terms, credit two hours a term. Prerequisite courses 3 and 21. Open only to seniors. First term, Assistant Professor BREWER; second term, Mrs. BOYS. Laboratory fee, \$10.

22. **Bibliography and Advanced Reading in Nutrition.** First term, credit one hour. Open only to seniors in home economics. Assistant Professor HENRY.

23. **Extension in Home Economics.** First and second terms, credit three hours a term. Open only to seniors who have given evidence of their ability to develop this work satisfactorily. Professor VAN RENSSELAER, Assistant Professor BREWER, and others. Laboratory fee, \$5 a term.

26. **Accounting.** First and second terms, credit two hours a term. Open only to seniors in home economics.

27. **Vocational Work in Clothing.** First and second terms, credit two hours or more. Prerequisite courses 15, 15a, 16, 17, and 19. Required of and open only to students who expect to teach in vocational high schools. Miss INGERSOLL. Laboratory fee, \$5 a term.

28. **Woman and the State.** Second term, credit three hours. Assistant Professor HAZARD.

LANDSCAPE ART

[1. **Appreciation of Landscape.** First term, credit one hour. Professor DAVIS.] Not given in 1918-1919.

2. **A Brief Introduction to Landscape Design.** First and second terms, credit two hours a term. Professor DAVIS and Assistant Professor MONTILLON.

3. **History of Landscape Design.** First term, credit two hours. Open to general election, and intended for sophomores in landscape art. Professor DAVIS. Laboratory fee, \$1.

4. **Theory and Aesthetics of Landscape Design.** First term, credit two hours. Prerequisite course 3. Professor DAVIS.

4a. **Theory: Planning of Private Properties.** First term, credit one hour. Prerequisite course 3, and, for students specializing in landscape art, course 4. Professor DAVIS.

4b. **Theory: Planning of Public Properties.** Second term, credit two hours. Prerequisite for landscape students only, courses 3 and 4. Professor DAVIS.

6. **Rural Improvement.** A course of six or more lectures beginning after the Christmas recess, without credit. These lectures are outlined primarily for winter-course students. Professor CURTIS.

9. **Landscape Design, Elementary Course.** Second term, credit two hours. Prerequisite courses 3 and 4, Architecture 9, 11, and 13. Intended for sophomores in landscape art. Assistant Professor MONTILLON and Mr. SCHUMM. Laboratory fee, \$1.

11. **Landscape Design, Intermediate Course.** First and second terms, credit four hours a term. Prerequisite courses 3, 4, 4a, 9, and 13, Architecture 9, 11, and 13, and Drawing 2, 3, and 4. Intended for juniors in landscape art. Assistant Professor MONTILLON and Mr. SCHUMM. Laboratory fee, \$2 a term.

13. **Plant Materials.** Third term, credit six hours. Prerequisite Botany 1. Open to general election but intended for juniors in landscape art. Professor CURTIS. Laboratory fee, \$1.50.

13a. **A Brief Introduction to Plant Materials.** First term, credit three hours. Professor CURTIS. Laboratory fee, \$1.50.

15. **Landscape Design, Advanced Course.** First and second terms, credit three or eight hours a term. Prerequisite course 11 and its prerequisites, and courses 13 and 17. Intended for seniors in landscape art. Assistant Professor MONTILLON. Laboratory fee, \$1 a term.

16. **Landscape Engineering and Details of Construction.** Second and first terms; credit, second term, three hours, first term, three or eight hours. Interrelated with course 15. Prerequisite Civil Engineering 10; must be accompanied by Civil Engineering 11a. Intended for seniors in landscape art. Professor DAVIS and Mr. SCHUMM.

17. **Planting Design, Elementary Course.** First term, credit three hours. Prerequisite course 13. Intended for juniors in landscape art. Professor CURTIS.

17a. **A Brief Introduction to Planting Design.** First term, credit two hours. Prerequisite course 13a. Professor CURTIS. Laboratory fee, \$1.50.

18. **Planting Design, Advanced Course.** First term, credit three or eight hours. Interrelated with course 15. Prerequisite course 17. Intended for seniors in landscape art. Professor CURTIS.

20. **Propagation.** First and second terms, credit one hour a term. Mr. HUNN.

25. **Seminary.** First and second terms, credit one hour a term. Intended for seniors in landscape art. Departmental staff.

Special Lectures and Excursions.

METEOROLOGY

1. **Meteorology and Climatology.** First or second term, credit three hours. Professor WILSON and Mr. MORDOFF. Laboratory fee, \$2.

[2. **General Climatology.** Second term, credit three hours. Prerequisite course 1. Professor WILSON and Mr. MORDOFF.] Not given in 1918-1919.

3. **Climatology of the United States.** First term, credit three hours. Prerequisite courses 1 and 2. Professor WILSON and Mr. MORDOFF. Laboratory fee, \$2.

10. **Research.** First and second terms, credit one or more hours a term. For graduates and advanced students. Prerequisite permission to register. Professor WILSON.

PLANT BREEDING

1. **Genetics.** First or third term, credit four hours or, by special arrangement, without laboratory, three hours. Prerequisite Botany 1 and 20, or equivalents in zoology by permission. First term, Professor HUTCHISON, Assistant Professor BARKER, and Messrs. FRASER and EYSTER; third term, Assistant Professor BARKER and Mr. FRASER. Laboratory fee, \$3.

8. **Methods of Plant Breeding.** Second term, credit one hour. Prerequisite course 1. Professor MYERS.

Advanced and Graduate Courses

11. **Biometry.** First term, credit two hours. For graduate students only. Professor LOVE.

13. **Genetics, Advanced Course.** Second term, credit three hours. Primarily for graduate students. Seniors admitted by special arrangement only. Prerequisite course 1 or its equivalent, and Botany 1, 10, and 20. Professor HUTCHISON and Mr. ANDERSON. Laboratory fee, \$3.

14. **Organic Evolution.** First term, credit two hours. For seniors and graduate students. Prerequisite course 1. Assistant Professor BARKER.

16. **Research.** Throughout the year. For graduate students only. Professors EMERSON, LOVE, MYERS, and HUTCHISON, and Assistant Professor BARKER.

17. **Seminary.** First and second terms. One hour a term. For graduate students only. Professors EMERSON, LOVE, MYERS, and HUTCHISON, and Assistant Professor BARKER.

PLANT PATHOLOGY

1. **General Plant Pathology.** Credit one, three or four hours. First, second, or third term. Prerequisite Botany 1, or equivalent botany of the same type. Professor WHETZEL, Assistant Professors GREGORY, HESLER, RANKIN, and Miss SMILEY.

2. **Principles of Plant Disease Control.** Prerequisite course 1.

GENERAL SECTIONS. Second term, credit three hours. Professor WHETZEL and Mr. TAPKE.

FORESTRY SECTION. Second term, credit two hours. Assistant Professor RANKIN. Laboratory fee, \$1.50 a credit hour; breakage deposit, \$3.

6. **Elementary Mycology.** First term, credit four hours. Prerequisite Botany 1 or its equivalent. Assistant Professor FITZPATRICK. Laboratory fee, \$6; breakage deposit, \$3.

9. **Timber Decay and Its Prevention.** Second term, credit one hour. Prerequisite course 1. Assistant Professor RANKIN.

11. **Fungous Diseases of Plants.** First term, credit one hour. Prerequisite course 1 or 6. Assistant Professor HESLER.

12. **Mycology.** First and second terms, credit four hours a term. Prerequisite Botany 1 or its equivalent. Assistant Professor FITZPATRICK. Laboratory fee, \$6; breakage deposit, \$3.

[14. **Mycology.** First term, credit four hours. Prerequisite Botany 1 or its equivalent. Assistant Professor FITZPATRICK.] Not given in 1918-1919.

15. **Phytopathological Histology.** Second or third term, credit two hours. Prerequisite course 1, Botany 9, and permission to register. Professor WHETZEL and Miss SMILEY.
16. **Bacterial Diseases of Plants.** First term, credit one hour. Prerequisite course 1 and elementary bacteriology. Professor WHETZEL.
17. **History of Phytopathology.** Second or third term, credit one hour. Prerequisite course 1 and a reading knowledge of French and German. Professor WHETZEL.
19. **German Phytopathological Reading.** First or second term, two one-hour periods a week. Without credit for undergraduate students. Open only to advanced or graduate students who have had elementary training in German. Professor WHETZEL.
20. **Research.** Throughout the year: Not less than three hours a term. Professors WHETZEL, REDDICK, and BARRUS, and Assistant Professors FITZPATRICK, GREGORY, HESLER, and RANKIN. Laboratory fee, \$1.50 a credit hour; breakage deposit, \$3.
25. **Seminary.** First and second terms. For graduate students in plant pathology. Departmental staff.

POMOLOGY

1. **Pomology.** First or second term, credit three hours. Prerequisite for regular students Biology 1 and the farm practice requirements, or Botany 1 and 20. Assistant Professors HEINICKE and OVERHOLSER, and assistants. Laboratory fee \$3.50, deposit \$1.
8. **Fruit Varieties: Exhibits, Identification, Judging.** First term, credit one hour. Prerequisite course 1. Assistant Professor OVERHOLSER. Laboratory fee, \$3.50.
9. **Packing Fruit for Market.** First term, credit two hours. Prerequisite courses 1 and 8, and permission to enter; must be preceded or accompanied by Entomology 3, Plant Pathology 1, and Soils 1. Professor REES. Laboratory fee, \$3.50.
10. **Economic Fruits of the World.** Second or third term, credit two hours. Prerequisite courses 1 and 8, and Botany 1. Assistant Professors OVERHOLSER and HEINICKE. Laboratory fee, \$1.
11. **Orchard Field Trip.** Credit one hour. During the three weeks preceding the opening of the first term. Prerequisite courses 1, 8, and 10, and permission to register. Assistant Professors HEINICKE and OVERHOLSER.
12. **Experimental Pomology.** Second term, credit two hours. Prerequisite courses 1, 8, and 10, and Botany 1, and permission to register; must be preceded or accompanied by Botany 20, Plant Pathology 1, Entomology 3, and Soils 1. Professor CHANDLER.
13. **Pomology, Advanced Laboratory Course.** Third term, credit one hour. Prerequisite courses 1, 8, 10, and 12, and permission to register. Assistant Professor HEINICKE and assistants. Laboratory fee, \$2.
19. **Research.** Throughout the year, credit one hour a term. Prerequisite courses 10 and 12, Botany 1 and 20, Plant Pathology 1, Entomology 3, and Chemistry 1 and 32. Professors CHANDLER and REES, and Assistant Professors OVERHOLSER and HEINICKE.
20. **Seminary.** Once each month throughout the year. Required of graduate students in pomology. Departmental staff.

POULTRY HUSBANDRY

1. **Poultry Husbandry.** Second or third term, credit three hours. Professor RICE and assistant.
- 1a. **Poultry Husbandry.** First term, credit three hours. Prerequisite course 1. Professor RICE, Assistant Professor KENT, and Mr. BANNER.
2. **Poultry Feeds and Feeding.** First term, credit two hours. Prerequisite course 1 and Animal Husbandry 1. Mr. HEUSER and assistant.
- 2a. **Flock Management.** First, second, or third term, credit one hour. Must be preceded or accompanied by course 2 or by course 10, and preferably also by Animal Husbandry 1. Persons registering for this course for the first term may not register for course 3 or 3a. Messrs. HEUSER and ANDREWS.
3. **Incubator Practice.** First, second, or third term, credit one hour. Must be preceded or accompanied by course 1a or by course 10. Mr. BANNER and assistant.
- 3a. **Brooder Practice.** First, second, or third term, credit one hour. Must be preceded or accompanied by course 1a or by course 10. Mr. BANNER and assistant.
4. **The Breeds of Poultry and Judging.** First term, credit two hours. Prerequisite course 1. Assistant Professor KENT and assistant.
- 4a. **Judging, Advanced Course.** First term, credit one hour. Prerequisite course 4 and permission to register. Assistant Professor KENT.
5. **Poultry-House Design and Construction.** First term, credit two hours. Prerequisite course 1 and permission to register. Assistant Professor KENT and assistants.
7. **Market Products.** Second term, credit two hours. Prerequisite course 1. Assistant Professor BENJAMIN, Mr. MACOMBER, and assistants. The total necessary expense is about \$20.
- 7a. **Marketing Practice.** First, second, or third term, credit one hour. Prerequisite course 7 and permission to register. Assistant Professor BENJAMIN, Mr. MACOMBER, and assistants.
8. **Poultry Farm Management.** Second term, credit two hours. Prerequisite courses 1, 1a, 2, 4, 5, and Farm Management 1; must be preceded or accompanied by courses 2a, 3, 3a, 7, and Farm Management 2. Professor RICE and Mr. BOTSFORD.

9. **Commercial Marketing.** Second term, credit two hours. Prerequisite course 7. Assistant Professor BENJAMIN and Mr. MACOMBER.

10. **Farm Poultry.** Second or third term, credit three hours. Professor RICE, Assistant Professors BENJAMIN and KENT, and Messrs. HEUSER and BANNER.

11. **Undergraduate Conference.** First, second, or third term, or throughout the year, credit one hour a term. Prerequisite permission to register; must be preceded or accompanied by course 8. Departmental staff.

11a. **Seminary.** Throughout the year. For graduate students only; required of all graduate students in poultry husbandry. Departmental staff.

12. **Research.** First, second, or third term, or throughout the year, credit one to three hours a term. Prerequisite permission to register; must be preceded or accompanied by courses 8 and 11. Departmental staff.

RURAL ECONOMY

1. **Agriculture.** First term, credit two hours. Open only to freshmen. Professor LAUMAN.

4. **Economic and Social Status of the Rural Community.** First term, credit three hours. Prerequisite Political Science 51. Professor LAUMAN, Mr. WRIGHT, and assistants.

5. **Marketing and Prices.** First term, credit three hours. Prerequisite Political Science 51. Professor LAUMAN, Mr. WRIGHT, and assistants.

6. **History of Agriculture.** Second term, credit three hours. Open only to seniors. Professor LAUMAN.

7. **Rural Economy.** Second term, credit three hours. Open only to selected seniors who have had course 4 and additional training in economics and history. Professor LAUMAN.

8. **Cooperation.** Second term, credit three hours. Prerequisite Political Science 51. Professor LAUMAN, Mr. WRIGHT, and assistants.

12. **Research in Rural Economy.** First and second terms, credit two or three hours a term. For seniors who have done superior work and for graduates. Professor LAUMAN.

14. **Seminary.** First and second terms. By special permission, for students who have had courses 4 and 5 or their equivalent. Professor LAUMAN.

16. **Rural Organization.** First term, credit two hours. Open only to seniors. Prerequisite Farm Management 2; must be preceded or accompanied by course 4 and Extension Teaching 1 and 2. Professor BURRITT.

RURAL EDUCATION

1. **Introduction to Education.** First or second term, credit four hours. Open to juniors and seniors. Professor KRUSE.

2. **Principles of Teaching.** First, second, or third term, credit four hours. Open to juniors and seniors who have completed course 1 or its equivalent. Professor STEWART and assistant.

3. **Agriculture in the High School.** First, second, or third term, credit three hours. Open to juniors and seniors who have completed courses 1 and 2 and who have met the farm practice requirements. Professor LUSK. Laboratory fee, \$1.

4. **Home Economics in the High School.** First or second term, credit three hours. Open to juniors and seniors who have completed courses 1 and 2. Professor WORKS and Miss BENNETT. Laboratory fee, \$1.

5. **Teaching.** First or second term, credit, not to exceed five hours, to be determined by work done. Open to seniors in agriculture and home economics. Professors WORKS and LUSK, and Miss BENNETT.

10. **Educational Measurement.** First term, credit two hours. Open to graduate students only. Professor KRUSE.

12. **Principles of Method.** Second term, credit three or four hours. Open to graduate students only. Professor STEWART.

14. **Organization of College Departments of Agricultural Education.** First term, credit two hours. Open to graduate students who have completed course 3. Those who have not had course 3 will be required to take the lectures of that course. Professor LUSK.

[16. **Rural Secondary Education.** First and second terms, credit two or three hours a term. Designed primarily for graduate students.] Not given in 1918-1919.

18. **Rural School Administration.** First and second terms, credit two or three hours a term. Open to graduate students only.

20. **Administration and Supervision of Vocational Agriculture.** Second term, credit two or three hours. Prerequisite first term of course 18 or the equivalent. Open to graduate students only. Professor WORKS.

21. **Rural School Surveys.** Credit according to work accomplished. Open to graduate students only. Professors WORKS, LUSK, STEWART, and KRUSE.

25. **Research in Rural Education.** Throughout the year. For graduate students only. Professors WORKS, LUSK, STEWART, and KRUSE.

26. **Seminary.** First and second terms, without credit. Required of graduate students. Professors WORKS, GRIFFIN, LUSK, STEWART, and KRUSE.

60. **Nature Study.** First term, credit three hours. Assistant Professor COMSTOCK.

61. **Nature Study.** Third term, credit three hours. Assistant Professor COMSTOCK.

62. **Nature Study, Advanced Course.** First term, credit three hours. Prerequisite Biology 1 or course 61. Assistant Professor COMSTOCK.

63. **Nature Study.** First term, credit one or more hours. Open only to teachers. Assistant Professor COMSTOCK.

65. **Conference on Nature Study.** First term, credit one hour. Open only to teachers or prospective teachers of nature study. Assistant Professor COMSTOCK.

RURAL ENGINEERING

1. **Farm Field Machinery.** Second term, credit three hours. Prerequisite Drawing 1 or reasonable and approved proficiency in drawing. Mr. FAIRBANKS and assistant. Intended to be taken either before or after course 2. Not open to students who have had course 3. Laboratory fee, \$2.

[2. **Farm Power Machinery.** First term, credit three hours. Prerequisite Drawing 1 or reasonable and approved proficiency in drawing. Mr. FAIRBANKS and assistant. Intended as supplementary to course 1, but may be taken independently. Laboratory fee, \$2.] Not given in 1918-19.

3. **Farm Mechanics.** First, second, or third term, credit three hours. First and second terms, Assistant Professor HAZEN and assistant; third term, Professor RILEY. Laboratory fee, \$2.

4. **Steam.** Second term, credit one or three hours. Mr. FAIRBANKS. Laboratory fee, for the three-hour course, \$2.

19. **Research in Farm Mechanics.** First, second, or third term, credit one or more hours. Prerequisite adequate ability and training for the work proposed, and permission to register. Professor RILEY.

20. **Farm Engineering.** First, second, or third term, credit three hours. Prerequisite plane geometry. Students are urged to take Drawing 1 in preparation for this course. Assistant Professors ROBB and McCURDY; third term, Mr. STRAHAN. Laboratory fee, \$2.

21. **Drainage and Irrigation.** (Same as Soils 21). Second term, credit three hours. Prerequisite courses 3 and 20 or the equivalent, Soils 1, and Drawing 1 or its equivalent. Professor BUCKMAN, and Assistant Professors ROBB and McCURDY. Laboratory fee, \$2.

28. **Farm Engineering, Advanced Course.** First term, credit three hours. Prerequisite course 20 or its equivalent. Assistant Professors ROBB and McCURDY.

30. **Farm Structures.** First or third term, credit two or four hours. Prerequisite Drawing 1 or its equivalent. Mr. STRAHAN. Laboratory fee, \$1.

41. **Farm Shop Work.** First or second term, credit three hours. Open only to prospective teachers of high school agriculture.

SOIL TECHNOLOGY

1. **Principles of Soil Management.** First or second term, credit three hours. Prerequisite Chemistry 1 and Geology 1. Professor BUCKMAN. Laboratory deposit, \$3.

5. **Soil Surveying, and Mechanical Soil Analysis.** First term, credit three hours. Prerequisite course 1, Physical Geography 5, and Chemistry 6. Professors BUCKMAN and BIZZELL. Laboratory deposit, \$3.

6. **Soils, Advanced Course.** First term, credit two hours. Prerequisite course 1, and Chemistry 6. Professor BIZZELL.

7. **Soil Bacteriology.** Second term, credit two hours. Prerequisite course 1, Dairy Industry 4, and Chemistry 6. Assistant Professor WILSON. Laboratory deposit, \$5.

11. **Research.** Throughout the year. For graduate students only. Professor BIZZELL and other members of the Department.

14. **Seminary.** First and second terms, without credit. Open to seniors who have taken course 6, and required of graduate students. Professors LYON, FIPPIN, BIZZELL, and BUCKMAN, and Assistant Professors WILSON and WARSAW.

21. **Drainage and Irrigation.** Second term, credit three hours. Prerequisite course 1, Rural Engineering 3 and 20 or the equivalent, and Drawing 1 or its equivalent. Professor BUCKMAN, and Assistant Professors ROBB and McCURDY. Laboratory fee, \$2.

WILD LIFE CONSERVATION AND GAME BREEDING

1. **The Conservation of Wild Life and Game Breeding.** Second term, credit two hours. Professors RICE and NEEDHAM, Assistant Professors ALLEN and EMBODY, Mr. KRUM, and cooperating specialists.

2. **Practice in Wild Life Conservation and Game Breeding.**

Two summers, spent in the field in the furtherance of technical training along one or more of the lines covered by course 1.

Special Public Lectures.

SCHOLARSHIPS AND PRIZES

The Eastman Prize for Public Speaking, the Stewart Prize for the Production of Clean Milk, the C. Lathrop Pack Prize, and the Roberts Scholarships are awarded only to students in the College of Agriculture. For these and for the prizes and scholarships open to all students of the University, see page 155.

COLLEGE OF ARCHITECTURE

For detailed information concerning the work of the College of Architecture, candidates for admission to the college should consult the Announcement of the College of Architecture which will be sent gratis on application to the Secretary of the University.

FACULTY

JACOB GOULD SCHURMAN, A.M., D.Sc., LL.D., President of the University.

CLARENCE AUGUSTINE MARTIN, Dean of the College of Architecture and Professor of Architecture.

OLAF MARTINIUS BRAUNER, Professor of Drawing and Painting.

ALBERT CHARLES PHELPS, B.S., M.Arch., Professor of Architecture and Secretary of the Faculty of Architecture.

GEORGE YOUNG, jr., B.Arch., Professor of Architecture in the Theory of Construction. (Absent on leave, first term.)

EVERETT VICTOR MEEKS, A.B., A.D.G., Acting Professor of Architecture.

CHRISTIAN MIDJO, Assistant Professor of Freehand Drawing and Modeling.

LEROY P. BURNHAM, B.S. Arch., M.S. Arch., Assistant Professor of Design.

GEORGE RAY CHAMBERLAIN, M.E., Assistant Professor of Freehand Drawing.

SHEPHERD STEVENS, B.S., A.D.G., Assistant Professor of Design. (Absent on leave, first term.)

HIRAM SAMUEL GUTSELL, B.P., A.M., Assistant Professor of Freehand Drawing.

HUBERT E. BAXTER, B.Arch., Instructor in Architecture. (Absent on leave.)

Students in the College of Architecture receive instruction also from a large corps of professors and instructors in the Colleges of Arts and Sciences, Civil Engineering, Mechanical Engineering, and Agriculture (Department of Landscape Design).

THE DEGREES OF BACHELOR OF ARCHITECTURE AND OF BACHELOR OF SCIENCE IN ARCHITECTURE

For admission to the College of Architecture, see page 37; for tuition in the College of Architecture, see page 44.

The undergraduate instruction for students in the college of Architecture leads to the degree of Bachelor of Architecture or to the degree of Bachelor of Science in Architecture, the requirements for which are the completion of one of the following curricula.

1. The curriculum of four years in Architecture leading to the degree of Bachelor of Architecture.

2. The curriculum of four years in construction leading to the degree of Bachelor of Science in Architecture.

3. The curriculum of five years in Architecture leading to the degree of Bachelor of Architecture.

4. The curriculum of five years in construction leading to the degree of Bachelor of Science in Architecture.

For the requirements in military science and tactics and in physical culture, see pages 164-165.

Admission as Special Students not Candidates for the degrees B.Arch. and B.S.Arch.

Applicants may, without formal examination, be admitted to the two-year special curriculum in architecture, provided they give satisfactory evidence of ability to do the required work of the course and have neither been previously admitted to the University nor refused as candidates for admission. The applicant must be at least twenty-one years of age; he must have had a good high school training or its equivalent, including particularly a good working knowledge

of plane geometry and of algebra, through quadratic equations; and should be familiar with the details and proportions of the classic orders of architecture. He shall have had at least three years' experience in some good architect's office, or its equivalent, and shall submit with his application examples of his draftsmanship. Architectural drawings in particular are required, but it is to the applicant's advantage to submit any additional work that would tend to show his artistic ability or skill as a draftsman. The application should be accompanied by a certificate that the drawings submitted are the work of the applicant.

THE CURRICULUM OF FOUR YEARS IN ARCHITECTURE

Freshman Year	No. of Course	1st Term	2d Term
Analytical Geometry and Calculus	8	3	3
Descriptive Geometry	9	3	—
History of Architecture	10	3	3
Elements of Architecture	11	3	3
Freehand Drawing	12	3	3
Shades and Shadows	13	—	2
Water Color Painting	14	—	2
Masonry Construction	15	—	2
Building Stones and Clay Products	30	2	—
Summer Reading (See page 136)			
Sophomore Year	No. of Course	1st Term	2d Term
History of Architecture	20	3	—
Design	21	8	8
Drawing from the Antique	22	1	2
Adv. Water Color Painting	23	2	—
Perspective	24	—	1
Historic Ornament	25	—	2
Modeling	26	—	2
Mechanics	27	—	2
Stereotomy	28	1	—
Oral Expression	29	3	—
Summer Reading (See page 136)			
Junior Year	No. of Course	1st Term	2d Term
History of Painting and Sculpture	30	1	1
Design	31	8	—
Design	31a	—	6
Drawing from the Antique	32	2	—
Fire-Resisting Construction	33	1	—
Carpentry and Specifications	34a	2	—
Working Drawings	34b	—	4
Strength of Materials	35	2	—
Graphic Statics	35a	1	—
Structural Design	35b	—	5
Heating, Plumbing, and Lighting	36	—	2
Senior Year	No. of Course	1st Term	2d Term
Modern Architecture	40	—	2
Design	41	10	8
Design	41a	—	4
Life Class	42	3	—
City Planning	44	1	—
Elective		3	2

THE CURRICULUM OF FOUR YEARS IN CONSTRUCTION

Freshman Year	No. of Course	1st Term	2d Term
Analytical Geometry and Calculus	5	5	5
Descriptive Geometry	9	3	—
History of Architecture	10	3	3
Elements of Architecture	11	3	3
Freehand Drawing	12	3	3
Shades and Shadows	13	—	2
Masonry Construction	15	—	2
Summer Reading (See page 136)			

Sophomore Year	No. of Course	1st Term	2d Term
Design	21	8	8
Perspective	24	—	1
Mechanics (C.E.)	20	5	—
Mechanics (C.E.)	21	—	5
Physics	2	5	—
Heating, Plumbing, and Lighting	36	—	2
Elective	—	—	2
Summer Reading (See page 136)			

Junior Year	No. of Course	1st Term	2d Term
History of Architecture	20	3	—
Design	31	8	—
Carpentry and Specifications	34a	2	—
Bridges (C.E.)	71	4	4
Materials laboratory (C.E.)	22	—	2
Materials of Construction (C.E.)	25	—	3
Concrete Construction (C.E.)	77	—	3
Modern Architecture	40	—	2
Oral Expression	29	—	3

Senior Year	No. of Course	1st Term	2d Term
Antique, Water Color, or Modeling		2	—
Fire-Resisting Construction	33	1	—
City Planning	44	1	—
Steel Buildings (C.E.)	76	—	3
Concrete Design (C.E.)	78	—	3

In addition to the above not less than 23 hours (the major part of which must be in Engineering) from courses in Engineering, Architecture, and Economics or kindred subjects, the election in all cases to be subject to faculty approval.

THE CURRICULUM OF FIVE YEARS LEADING TO THE DEGREE OF BACHELOR OF ARCHITECTURE OR BACHELOR OF SCIENCE IN ARCHITECTURE

Since considerable latitude is allowed in choice of entrance subjects offered for admission to this curriculum, the first two years must be varied accordingly. The following outline is given as the basis upon which the curriculum will be formulated.

First Year

Courses required if not offered for entrance

	No. of Course	1st Term	2d Term
*French	1	6	or 6
English	1 or 3	4	4
Solid Geometry	1	3	or 3
Advanced Algebra	2	5	or 5
or			
Advanced Algebra	2 (E)	3	
Plane Trigonometry	3	3	or 3

Courses especially recommended for election

*Chemistry	1	6	or 6
Physics	3	6	or 6
History of Architecture	10	3	3
Freehand Drawing	12	3	3

Other subjects from which election is advised are: German, Spanish, History, Psychology, Geology, Music.

Second Year

This should comprise all of the first year of the curriculum of four years not already taken, with electives to make a full schedule. These electives may be chosen somewhat freely but are subject to faculty approval. In general the student is advised to elect non-professional subjects such as language, economics, etc.

Third, Fourth, and Fifth Years

The prescribed work for these years will be the same as that of the last three years of the regular curriculum of four years in architecture or construction.

SPECIAL CURRICULUM OF TWO YEARS IN ARCHITECTURE

This special curriculum does not lead to a degree, but a certificate will be issued upon its satisfactory completion. Where students are prepared to do advanced work arrangements will be made, within the limits of the curriculum, to meet individual cases.

First Year	No. of Course	1st Term	2d Term
History of Architecture	10	3	3
Design	21	8	8
Freehand Drawing	12	3	3
Descriptive Geometry	9	3	—
Shades and Shadows	13	—	2
Perspective	24	—	1
Water Color Painting	14	—	2
Second Year	No. of Course	1st Term	2d Term
History of Architecture	20	3	—
Design	41	10	8
Design	41a	—	4
Drawing from the Antique	22	1	—
Advanced Water Color Painting	23	2	—
Modeling in Clay	26	—	2
Modern Architecture	40	—	2

The Degrees of A. B. and B. Arch.

In accordance with the rules of the College of Arts and Sciences, qualified seniors in that college may take their senior year in the College of Architecture, receiving the degree of A.B. at the end of the year. If by their privileges of

*Students entering the construction course are required to take Chemistry, but will not be required to take French.

election of subjects in the College of Arts and Sciences, these seniors have during their first three years completed the required freshman subjects in architecture, they may thus, by the end of their fourth year of residence, complete the architectural subjects required in the sophomore year. The fifth year and the sixth year of residence, with registration in the College of Architecture, will then be the junior year and the senior year of the curriculum of four years in the College of Architecture.

The Degrees of C. E. and B.S. Arch.

By special arrangement between the colleges concerned, a student may in six years secure the degree of Bachelor of Science in Architecture and the degree of Civil Engineer.

COURSES OF INSTRUCTION

- 1a. **Elementary Freehand Drawing.** Throughout the year, credit two hours a term. Assistant Professor CHAMBERLAIN and Assistant Professor GUTSELL.
- 1b. **Elementary Freehand Drawing.** Throughout the year, credit three hours a term. Assistant Professor CHAMBERLAIN and Assistant Professor GUTSELL.
- 2a. **Advanced Freehand Drawing.** Throughout the year, credit two hours a term. Prerequisite course 1b or its equivalent. Assistant Professor CHAMBERLAIN and Assistant Professor GUTSELL.
- 2b. **Advanced Freehand Drawing.** Throughout the year, credit three hours a term. Prerequisite course 1b or its equivalent. Assistant Professor CHAMBERLAIN and Assistant Professor GUTSELL.
8. **Analytic Geometry and Calculus.** Throughout the year, credit three hours a term. Given in the College of Arts and Sciences.
9. **Descriptive Geometry.** First term, credit three hours. Prerequisite Solid Geometry. Professor YOUNG and Mr. BAXTER.
10. **History of Architecture.** Throughout the year, credit three hours a term. Professor PHELPS.
11. **Elements of Architecture.** Throughout the year, credit three hours each term. The second term must follow or be taken with Shades and Shadows.
12. **Freehand Drawing.** Throughout the year, credit three hours a term. Assistant Professor CHAMBERLAIN.
13. **Shades and Shadows.** Second term, credit two hours. This course must follow or be accompanied by descriptive geometry. Professor MARTIN.
14. **Water Color Painting.** Second term, credit two hours. Prerequisite course 12. Assistant Professor MIDJO.
15. **Masonry Construction.** Second term, credit two hours. Professor MARTIN.
20. **History of Architecture.** First term, credit three hours. Prerequisite course 10. Professor PHELPS.
21. **Design.** Throughout the year, credit eight hours a term. Prerequisite courses 11 and 13. Assistant Professor STEVENS.
- 21a. **Interior Decoration.** Throughout the year, credit four hours a term. Prerequisite course 21 or its equivalent. Assistant Professor STEVENS.
22. **Drawing from the Antique.** Throughout the year, credit one hour first term and two hours second term. Prerequisite course 12. Professor BRAUNER, and Assistant Professor MIDJO.
23. **Advanced Water Color Painting.** First term, credit two hours. Prerequisite course 14. Assistant Professor MIDJO and Assistant Professor GUTSELL.
24. **Perspective.** Second term, credit one hour. Prerequisite courses 9 and 11. Professor MARTIN and Mr. BAXTER.
25. **Historic Ornament.** Second term, credit two hours. Prerequisite courses 10 and 20. Professor PHELPS.
26. **Modeling.** Second term, credit two hours. Assistant Professor GUTSELL.
27. **Mechanics.** Second term, credit two hours. Prerequisite Mathematics 8. Professor YOUNG.
28. **Stereotomy.** First term, credit one hour. Prerequisite course 9. Mr. BAXTER.
29. **Oral Expression.** First term, credit three hours. Given in the College of Arts and Sciences by Professor WINANS.
30. (A. and S.) **Building Stones and Clay Products.** First term, credit two hours. Given in the College of Arts and Sciences by Professor RIES and Mr. GREENLAND.
30. **History of Painting and Sculpture.** Throughout the year, credit one hour a term. Professor PHELPS.
- 30a. **History of Art.** Throughout the year, credit two hours a term. Assistant Professor GUTSELL.
- 30b-1. **History of Art.** First term, credit two hours. Assistant Professor GUTSELL. Given in 1918-1919 and alternate years following.
- 30b-2. **History of Art.** Second term, credit two hours. Assistant Professor GUTSELL. Given in 1918-1919 and alternate years following.
31. **Design.** First term, credit eight hours. Prerequisite course 21. Assistant Professor BURNHAM.
- 31a. **Design.** Second term. Credit six hours. Prerequisite courses 21 and 31. Assistant Professor BURNHAM.
32. **Drawing from the Antique.** First term, credit two hours. Prerequisite course 22. Professor BRAUNER and Assistant Professor MIDJO.
33. **Fire Resisting Construction.** First term, credit one hour. Professor MARTIN.
- 34a. **Carpentry and Specifications.** First term, credit two hours. Professor MARTIN.

34b. **Working Drawings.** Second term. Credit four hours. Prerequisite courses 21 and 31. Assistant Professor BURNHAM.

35. **Strength of Materials.** First term, credit two hours. Prerequisite course 27. Professor YOUNG and Mr. BAXTER.

35a. **Graphic Statics.** First term, credit one hour. Prerequisite course 27, and must follow or be taken with course 35. Professor YOUNG and Mr. BAXTER.

35b. **Structural Design.** Second term, credit five hours. Prerequisite courses 27, 35 and 35a. Professor YOUNG and Mr. BAXTER.

36. **Heating, Plumbing, and Lighting.** Second term, credit two hours. Professor MARTIN.

40. **Modern Architecture.** Second term, credit two hours. Prerequisite courses 10 and 20. Professor PHELPS.

41. **Design.** Throughout the year, credit ten hours first term, and eight hours second term. Prerequisite courses 21 and 31. Acting Professor MEEKS and Assistant Professor BURNHAM.

41a. **Design.** Second term, credit four hours. Acting Professor MEEKS and Assistant Professor BURNHAM. Prerequisite course 41.

42. **Life Class.** Throughout the year, credit three hours first term and two hours second term. First term required, second term elective. Professor BRAUNER.

43. **Historical Seminary.** Throughout the year, credit one hour a term. Prerequisite courses 10 and 20. Professor PHELPS.

44. **City Planning.** First term, credit one hour. Lectures by nonresidents and by members of the University Faculty. It is advised that course 57b in Citizenship, given in the department of Political Science, two hours, second term, be elected to supplement the work of this course.

50. **History of Architecture.** Throughout the year, credit one hour a term. Professor PHELPS. Given in 1917-18 and in alternate years following.

50a. **History of Renaissance Architecture.** First term, credit one hour. Prerequisite course 50 or course 10. Professor PHELPS. Given in 1918-1919 and in alternate years following.

Summer Reading. In addition to the regular studies of the freshman and sophomore years the students are required to read, during the summer recess, books of their own selection from grouped lists. The book lists are prepared and one or more introductory lectures given each year, just before the summer vacation, by one of the professors in the Department of English in the College of Arts and Sciences.

SUMMER TERM

In the summer of 1918 instruction in Architecture was provided in a term beginning May 27, 1918, and extending to September 11, 1918. Courses in this summer term were open to students who had completed the junior year. This arrangement was made to enable students to finish their college course and enter government service in February, 1919, instead of the following June.

SCHOLARSHIPS AND PRIZES

The Sands Memorial Medal and the Brown Memorial Medal are awarded annually for especially meritorious work in design; the Fuertes Memorial Prizes in Public Speaking are awarded to students in the Colleges of Architecture, Mechanical Engineering, and Civil Engineering. For these, and for the scholarships and prizes that are open to all students of the University, see page 155.

Graduates of the College of Architecture are admitted without examination to the competitions for scholarships in the American Academy in Rome, and to the Paris Prize competition of the Society of Beaux-Arts Architects; and they are excused from the usual examinations, except those relating to practical experience, required for admission to the American Institute of Architects and for license in those states where a license is required for the practice of architecture.

COLLEGE OF CIVIL ENGINEERING

For detailed information concerning the work of the College of Civil Engineering, candidates for admission to that college should consult the Announcement of the College of Civil Engineering which will be sent gratis on application to the Secretary of the University.

FACULTY

JACOB GOULD SCHURMAN, A.M., D.Sc., LL.D., President of the University.
EUGENE ELWIN HASKELL, C.E., Dean of the College of Civil Engineering and Professor of Experimental Hydraulics.
IRVING PORTER CHURCH, C.E., M.C.E., Emeritus Professor of Applied Mechanics and Hydraulics.
HENRY SYLVESTER JACOBY, C.E., Professor of Bridge Engineering, in charge of the College Library.
HENRY NEELY OGDEN, C.E., Professor of Sanitary Engineering.
FRED ASA BARNES, C.E., M.C.E., Professor of Railroad Engineering.
ORA MINER LELAND, B.S. (C.E.), Professor of Geodesy and Astronomy. (Absent on leave.)
SIDNEY GONZALES GEORGE, C.E., Professor of Mechanics of Engineering.
JOHN THOMAS PARSON, Assistant Professor of Drawing.
ERNEST WILLIAM SCHODER, B.S., Ph.D., Assistant Professor of Experimental Hydraulics. (Absent on leave.)
MILES ALBION POND, Ph.B., Assistant Professor of Civil Engineering.
FRANCIS JOSEPH SEERY, S.B., Assistant Professor of Civil Engineering.
ERNST WILLIAM RETTGER, A.B., Ph.D., Assistant Professor of Applied Mechanics.
CHARLES LEOPOLD WALKER, C.E., Assistant Professor of Sanitary Engineering.
PAUL HALLADAY UNDERWOOD, C.E., Assistant Professor of Topographic and Geodetic Engineering.
EARLE NELSON BURROWS, C.E., M.C.E., Assistant Professor of Bridge Engineering.
WALTER L. CONWELL, C.E., Assistant Professor of Railroad Engineering. (Absent on leave.)
LEONARD ALEXANDER LAWRENCE, B.S., Assistant Professor of Topographic and Geodetic Engineering. (Absent on leave.)
LEONARD CHURCH URQUHART, C.E., Instructor in Bridge Engineering, Secretary of the College Faculty. (Absent on leave.)
CARL CRANDALL, C.E., Instructor in Civil Engineering. (Absent on leave.)
CHAUNCEY RUTHVEN MCANLIS, B.S., C.E., Instructor in Civil Engineering.
JOHN E. PERRY, B.S., Instructor in Railroad Engineering.
ERIC VAIL HOWELL, Instructor in Civil Engineering.

THE DEGREE OF CIVIL ENGINEER

For admission to the College of Civil Engineering see page 37; for tuition in the College of Civil Engineering see page 44.

The undergraduate instruction for students in the College of Civil Engineering leads to the degree of Civil Engineer, the requirement for which is the completion of the following curriculum. For the requirements in military science and tactics and in physical culture, see pages 164-165.

The Curriculum of Four Years in Civil Engineering
Freshman Year

	No. course	First term	Second term
Analytics	5 (1)	5	—
Differential and Integral Calculus	5 (2)	—	5
Physics	2	5	—
Physics	7	—	3
Chemistry	1	—	6
Descriptive Geometry	1	2	2
Drawing	2	1	1
Elementary Surveying.....	10	3	—
Introductory Lectures	9	1	—
Military Drill.....	1	3	3

Sophomore Year

	No. course	First term	Second term
Practical Geology	31	3	3
Mechanics of Engineering.....	20	5	—
Mechanics of Engineering.....	21	—	5
Materials Laboratory.....	22	2 or 0	0 or 2
Drawing	4	2	2
Advanced Surveying	11	2	3
Materials of Construction.....	25	3 or 0	0 or 3
Physics	14	0 or 2	2 or 0
Technical Reports.....	24	3	or 3
Military Drill	1	3	3
Summer Survey (five weeks in June and July).....	13	—	6

Junior Year

	No. course	First term	Second term
Elements of Economics	52	2	2
Railroads	60	4	1
Engineering Construction.....	67	—	3
Bridges	71	4	3
Hydraulics	40	3	—
Municipal Sanitation.....	52	—	3
Engineering Problems.....	29	—	2
Survey Computations and Mapping.....	14	1	—
*Elective	—	3	3

Senior Year

	No. course	First term	Second term
Public Speaking..... P. S.	1	3	or 3
Heat Engines and Auxiliaries..... P.	11	3	or 3
Elements of Electrical Engineering..... **E.	12	4	—
Water Supply..... C.E.	30	3	or 3
Concrete Construction..... C.E.	77	3	or 3
Specifications and Contracts..... C.E.	90	2	or 2
Engineering Design	91	3	or 3
Electives		6	and 6

Required hours in Senior year..... 17 16

*Of the electives in Junior year three hours may be taken in approved non-technical subjects.

**Any one desiring to take a more extended course than E. 12 may substitute E. 14 and E. 15.
These courses are described in the Announcement of Sibley College.

The required courses in mathematics, physics, chemistry, geology, and political economy are given in the College of Arts and Sciences. The required work in electrical engineering and steam machinery is given in Sibley College.

THE DEGREES OF BACHELOR OF ARTS AND CIVIL ENGINEER

Seniors in good standing in the College of Arts and Sciences, who have been in actual residence at least six terms, exclusive of summer sessions, and have a credit of at least 90 hours, may be registered both in the College of Arts and Sciences and in the College of Civil Engineering.

In accordance with this provision the following suggestion is given for a six-year course leading to the degrees of A.B. and C.E.

The following subjects are to be included in the course of study of at least 90 hours in the College of Arts and Sciences during the first three years of residence.

	No. course	First term	Second term
Analytic Geometry.....	5 (1)	5	—
Calculus	5 (2)	—	5
Physics	2, 7	5	3
Physics	10	1	1
Chemistry	1	6	(or 6)
Chemistry	6	5	(or 5)
Practical Geology	31	3	3
Descriptive Geometry.....	1	2	2
Drawing	2	1	1
Introductory Lectures.....	9	1	—
Elementary Surveying.....	10	3	—

The following subjects in Civil Engineering are to be taken during the fourth year, when registered in both colleges.

	No. course	First term	Second term
Elements of Economics.....	52	2	2
Drawing	4	2	2
Advanced Surveying.....	11	2	3
Mechanics of Engineering.....	20, 21	5	5
Materials Laboratory.....	22	—	2
Materials of Construction.....	25	—	3
Physics	14	2	—
Summer Survey (five weeks in June and July).....	13		6

The work for the fifth and sixth years is to include the subjects of the junior and senior years of the four-year course leading to the degree of Civil Engineer, except that course 52 in Elements of Economics should be replaced by electives.

COURSES OF INSTRUCTION

DESCRIPTIVE GEOMETRY AND DRAWING

1. **Descriptive Geometry.** Freshmen. Credit two hours first term, and two hours second term. Assistant Professor POND and assistant.
2. **Drawing and Lettering.** Freshmen. Credit two hours. Assistant Professor POND and assistant.
4. **Drawing and Lettering.** Sophomores. Throughout the year, two drawing periods a week. Prerequisite course 1. Assistant Professor PARSON.
9. **Introductory Lectures.** Freshmen. Credit one hour. Under the supervision of Dean HASKELL.

TOPOGRAPHIC AND GEODETIC ENGINEERING

10. **Elementary Surveying.** Freshmen. First term, credit three hours. Assistant Professors UNDERWOOD, WALKER, and LAWRENCE, and Messrs. PERRY and MCANLIS.
11. **Advanced Surveying.** Sophomores. Throughout the year: first term, credit two hours, second term, credit three hours. Prerequisite course 10. Assistant Professors UNDERWOOD, WALKER, and LAWRENCE, and Messrs. PERRY and MCANLIS.
- 11a. **Advanced Surveying.** For students in Forestry and Landscape Art. Second term, credit two hours. Prerequisite course 10. Assistant Professors UNDERWOOD and LAWRENCE.
12. **Elementary Surveying.** Primarily for students in Sibley College. Second term, credit two hours. Assistant Professor UNDERWOOD and Mr. PERRY.
13. **Summer Survey; Topographic, Hydrographic, and Geodetic Survey; Camp.** Sophomores. Five weeks in June and July; credit six hours. Prerequisite course 11. Open also to students in Forestry and Landscape Art who have had course 11a, for whom the work is modified to meet their special needs. Professor LELAND, Assistant Professors UNDERWOOD and LAWRENCE, and others.
14. **Survey Computations.** Juniors. Prerequisite course 13. First term, credit one hour. Professor LELAND and Assistant Professors UNDERWOOD and LAWRENCE.
- 14A. **Mapping.** Elective. Upperclassmen. Required of students in Forestry. Second term, credit two hours. Professor LELAND.
- 14B. **Problems in the Adjustment of Observations.** Elective. Upperclassmen. Prerequisite course 13. Second term, credit one hour. Professor LELAND.
15. **Least Squares: Adjustment of Observations.** Elective. Prerequisite, calculus and physics. First term, credit two hours. Assistant Professor UNDERWOOD.
16. **Advanced Topographic Surveying.** Elective. Upperclassmen. Prerequisite course 13. First term, credit two hours. Professor LELAND.
17. **Geodesy and Geodetic Laboratory.** Elective. Upperclassmen. Prerequisite course 11. First term, credit three hours. Professor LELAND.
18. **Geodetic Astronomy.** Elective. Upperclassmen. Prerequisite course 11. Second term, credit three hours. Professor LELAND and Assistant Professor UNDERWOOD.

MECHANICS OF ENGINEERING

20. **Mechanics of Engineering.** For sophomores in Civil Engineering. First term, credit five hours. Repeated in one section, second term. Prerequisite, Mathematics Course 5. Professor GEORGE and Assistant Professor RETTGER.
21. **Mechanics of Engineering.** Second term. Continuation of Mechanics 20. Prerequisite Mechanics 20. Credit five hours. Professor GEORGE and Assistant Professor RETTGER.
26. **Advanced Mechanics.** Seniors and graduates. Either term, credit three hours. Prerequisite courses 20 and 21. Professor GEORGE and Assistant Professor RETTGER.
29. **Engineering Problems.** Juniors. Second term, credit two hours. Prerequisite courses 20, 21 and 40. Professor GEORGE and Assistant Professor RETTGER.
24. **Technical Writing.** Sophomores. Either term, credit three hours. Professor OGDEN.

MATERIALS OF CONSTRUCTION

22. **Materials Laboratory.** Sophomores. Either term, credit two hours. Must be preceded by, or taken with, courses 20 and 21, and must be taken with course 25.
25. **Materials of Construction.** Sophomores. Either term, credit three hours. Must be preceded by, or taken with, courses 20 and 21, and must be taken with course 22.
27. **Testing Materials.** Elective. Seniors and graduates. Second term, credit three hours. Prerequisite courses 22 and 25 or their equivalents.

HYDRAULIC ENGINEERING

30. **Water Supply.** Seniors. Either term, credit three hours. Prerequisite course 40. Assistant Professor F. J. SEERY.

31. **Hydraulic Construction.** Seniors and graduates. First term, credit three hours. Repeated second term. Should be taken after or concurrently with Water Supply, 30. Course 31 may be substituted for Engineering Design, Course 91. Assistant Professor SEERY.

32. **Water Power Engineering.** Seniors and graduates. First term, credit three hours. Prerequisite, C. E. 40, and must be taken after or concurrently with Course 30. Course 32 may be substituted for Engineering Design, Course 91. Assistant Professor SEERY.

33. **Pumps and Pumping.** Seniors and graduates. Second term, credit three hours. Prerequisite Course 40; should be preceded by or taken concurrently with course 30. Assistant Professor SEERY.

THEORETICAL AND EXPERIMENTAL HYDRAULICS

40. **Hydraulics.** Juniors. First term, credit three hours. Prerequisite courses 20 and 21. Assistant Professor SCHODER.

41. **Advanced Hydraulics.** Elective for juniors and seniors. Second term, credit three hours. Prerequisite course 40. Assistant Professor SCHODER.

42. **Hydraulic Measurements.** Elective for seniors and graduates. First term, credit three hours. Prerequisite courses 40 and 41. Assistant Professor SCHODER.

43. **Experimental Hydraulic Motors and Pumps.** Elective for seniors and graduates. Second term, credit three hours. Prerequisite course 41. Assistant Professor SCHODER.

44. **Experimental Hydraulic Investigation.** Elective for seniors and graduates. Either term, credit three hours (or more in special cases). Prerequisite courses 40 and 41, or equivalent. Assistant Professors SCHODER.

MUNICIPAL AND SANITARY ENGINEERING

50. **Sanitary Biology.** Juniors. Second term, credit five hours. Prerequisite Chemistry, course 6. Assistant Professor WALKER.

52. **Municipal Sanitation.** Juniors. Second term, credit three hours. Prerequisite course 40. Professor OGDEN and Assistant Professor WALKER.

53. **Purification and Control of Water Supplies.** Seniors and graduates. Second term, credit three hours. Prerequisite course 40. Professor OGDEN.

54. **Sewerage Works.** Seniors and graduates. First term, credit three hours. Prerequisite course 52. Professor OGDEN.

55. **Sanitary Laboratory.** Seniors. Second term, credit three hours. Prerequisite courses 50, 52, and Chemistry 6. Professor OGDEN.

56. **Municipal Engineering.** Elective. Graduates. Professor OGDEN.

57. **Purification of Water.** Elective. Graduates. Professor OGDEN.

58. **Conference on Present Methods of Sewage Disposal.** Elective. Graduates. Professor OGDEN.

59. **A Laboratory Course for Graduates.** Professor OGDEN and Assistant Professor WALKER.

RAILROAD AND HIGHWAY ENGINEERING

60. **Railroad Surveying and Drawing.** Juniors. Throughout the year, credit four hours first term and one hour second term. Prerequisite course 13. Professor BARNES, Assistant Professor CONWELL, and Messrs. PERRY, CRANDALL, and MCANLIS.

61. **Railroad Maintenance of Way.** Elective. Seniors and graduates. First term, credit three hours. Prerequisite course 60. Professor BARNES.

62. **Railroad Operation and Management.** Elective. Seniors and graduates. Second term, credit three hours. Prerequisite course 60. Professor BARNES.

63. **Railroad Location.** Elective. Juniors and Seniors. Credit three hours, second term. Professor BARNES.

65. **Highway Engineering.** Elective. Seniors and graduates. Either term credit three hours. Prerequisite course 60. Assistant Professor CONWELL and Mr. PERRY.

66. **Highway Laboratory.** Elective. Juniors and seniors. Either term, credit three hours. Assistant Professor CONWELL and Mr. PERRY.

67. **Engineering Construction.** Juniors. Second term. Credit three hours. Prerequisites 40 and first term of 71. Professor BARNES, Assistant Professor CONWELL and Messrs. PERRY, CRANDALL, and MCANLIS.

69. **Military Engineering.** Professor BARNES.

BRIDGE ENGINEERING

71. **Structural Design and Bridge Stresses.** Juniors. First term, credit four hours. Prerequisite courses 20 and 21. Professor JACOBY, Assistant Professor BURROWS and Mr. URQUHART.

71. **Structural Design.** Juniors. Second term, credit three hours. Professor JACOBY and Assistant Professor BURROWS.

72. **Reinforced Concrete Arch.** Seniors and graduates. Elective. Either term, credit three

hours. This course may be substituted for engineering design, course 91f. Prerequisite courses 20 and 21, and the first part of course 71. Assistant Professor BURROWS.

73. **Higher Structures.** Elective. Seniors and graduates. Either term, credit three hours. Prerequisite courses 20, 21 and 71. Professor JACOBY.

74. **Masonry and Foundations.** Seniors and graduates. Either term, credit three hours. Prerequisite courses 20 and 21. Professor JACOBY.

75. **Bridge Design.** Elective. Seniors and graduates. Credit three hours. Prerequisite Course 71, both terms. Professor JACOBY, and Assistant Professor BURROWS.

76. **Steel Buildings.** Elective. Seniors and graduates. First term, credit three hours. Prerequisite courses 20, 21 and 71. This course may be substituted for Engineering Design course 91. Mr. URQUHART.

77. **Concrete Construction.** Either term, credit three hours. Prerequisite Courses 20 and 21. Mr. URQUHART.

78. **Concrete Design.** Elective. Seniors and graduates. Second term, credit three hours. Prerequisite Course 77. This course may be substituted for Engineering Design, Course 91. Mr. URQUHART.

79. **Concrete Design.** Elective. Seniors and graduates. Either term, credit three hours. Prerequisite Course 77. This course may be substituted for Engineering Design, Course 91. Mr. URQUHART.

SPECIFICATIONS, DESIGNS, ETC.

89. **Cost Keeping and Management.** Elective. Seniors and graduates only. First term, credit two hours. Professor BARNES.

90. **Specifications and Contracts.** Seniors. Either term, credit two hours. Professor BARNES, and Messrs. CRANDALL and PERRY.

91. **Engineering Design.** Seniors. Credit three hours.

(c) **Hydraulic Engineering.** Second term. General prerequisite 40 (or former 23) and 29. For best results hydraulic design should be preceded by course 30, but the two may be taken concurrently. Course 31 or 32 may be substituted for Engineering Design. One or both of these courses should be elected by the student specializing in hydraulics unless he has a good reason for electing independent design instead. The purpose of the course is not to duplicate in large part work regularly given in Courses 31, 32 and 41 or in the courses in structural engineering. Assistant Professor SCHODER.

(d) **Sanitary Engineering.** First term. This course must be preceded by or taken at the same time as course 54, and may not otherwise be elected. Professor OGDEN.

(e) **Railroad and Highway Engineering.** Second term. Professor BARNES, Assistant Professor CONWELL, and Messrs. PERRY and CRANDALL.

(f) **Bridge Engineering.** Second term. Prerequisite courses 71, 73, and 77. Courses 72, 75, 76, 78 and 79, may be substituted for engineering design. Professor JACOBY and Mr. URQUHART.

92. **Thesis.** Elective. Seniors. Credit three hours.

101. **Navigation.** For all students who have had mathematics up to and including trigonometry. Credit three hours, either term. Professor HASKELL.

105. **Advanced Engineering Drawing.** Second term. For students who have completed courses 1 and 4. Professor PARSON.

155. **Military Hygiene and Sanitation.** Open to all students of the University except freshmen. Second term. Credit, three hours. Professor OGDEN.

SCHOLARSHIPS AND PRIZES

The Fuertes Medals, the Charles Lee Crandall Prizes, and the income from the William C. Seidell Book Fund, are awarded only to students in the College of Civil Engineering; the Fuertes Memorial Prizes in Public Speaking are awarded only to students in the two colleges of engineering and in the College of Architecture. For these and for the prizes and scholarships open to all students of the University, see page 155.

SIBLEY COLLEGE OF MECHANICAL ENGINEERING AND THE MECHANIC ARTS

For detailed information concerning the work of Sibley College, candidates for admission to that college should consult the Announcement of Sibley College which will be sent gratis on application to the Secretary of the University.

FACULTY

- JACOB GOULD SCHURMAN, A.M., D.Sc., LL.D., President of the University.
ALBERT WILLIAM SMITH, B.M.E., M.M.E., Dean of the Faculty and Professor of Power Engineering.
DEXTER SIMPSON KIMBALL, A.B., M.E., Professor of Machine Design and Industrial Engineering.
GEORGE ROBERT MCDERMOTT, Professor of Structural Design.
HERMAN DIEDERICHS, M.E., Professor of Experimental Engineering.
ALEXANDER GRAY, B.S. in C.E., M.S. in E.E., Whitworth Scholar, Professor of Electrical Engineering.
WILLIAM NICHOLS BARNARD, M.E., Professor of Power Engineering.
VLADIMIR KARAPETOFF, C.E., M.M.E., Professor of Electrical Engineering.
EDGAR HARPER WOOD, M.E., M.M.E., Professor of Mechanics of Engineering.
CALVIN DODGE ALBERT, M.E., Professor of Machine Design.
ALBERT EDWARD WELLS, Professor of Machine Construction.
FRANK OAKES ELLENWOOD, A.B., Professor of Power Engineering.
WILL MILLER SAWDON, B.S. in M.E., M.M.E., Professor of Experimental Engineering, Assigned to Engineering Research.
GEORGE BURR UPTON, M.E., M.M.E., Assistant Professor of Experimental Engineering.
SEYMOUR STANTON GARRETT, C.E., Assistant Professor of Mechanics of Engineering.
VICTOR RAYMOND GAGE, M.E., M.M.E., Assistant Professor of Experimental Engineering.
ROBERTSON MATTHEWS, M.E., Assistant Professor of Power Engineering.
CLARENCE WALTER HAM, B.M.E., M.E., Assistant Professor of Machine Design.
MYRON A. LEE, M.E., M.M.E., Assistant Professor of Machine Design.
JOHN GEORGE PERTSCH, JR., M.E., Assistant Professor of Electrical Engineering.
FREDERICK GEORGE SWITZER, M.E., M.M.E., Assistant Professor of Hydraulics.
WILLIAM CYRUS BALLARD, JR., M.E., Assistant Professor of Electrical Engineering.
FRED STILLMAN ROGERS, B.S., M.E., Assistant Professor of Machine Design.
CLARENCE ELLSWORTH TOWNSEND, M.E., Assistant Professor of Machine Design.
WALTER RODNEY CORNELL, C.E., B.S., Instructor in Mechanics of Engineering.
ROBERT FRANKLIN CHAMBERLAIN, M.E., Instructor in Electrical Engineering.
ENOCH FRANCIS GARNER, M.E., Instructor in Machine Design.
HOMER JAMES HOTCHKISS, A.M., M.M.E., Instructor in Mechanics of Engineering.
HAROLD CHARLES PERKINS, M.E., Instructor in Mechanics of Engineering.
WILLIAM EMERSON MORDOFF, M.E., Instructor in Experimental Engineering.
GEORGE FRANCIS BASON, B.E., M.E., Instructor in Electrical Engineering.
CLINTON RUSSELL TOBEY, Instructor in Machine Design.
SHURLEY RUSSELL IRISH, Instructor in Machine Design.
JAMES EUGENE VANDERHOEF, Foreman of Foundry.

WALTER LISTON HEAD, Foreman of Forge Shop.
LEROY HOOPER, Foreman of Pattern Shop.
PAUL WELLENKAMP, Assistant in Machine Shop.
HOWARD STANLEY BUSH, Assistant in Pattern Shop.
CHARLES ALBERT BROOKS, Assistant in Forge Shop.
CHARLES E. PATTERSON, Assistant in Foundry.
WILLIAM FREDERICK HEAD, Assistant in Forge Shop.
DAVID BUSH GREEN, Assistant in Machine Shop.

THE DEGREE OF MECHANICAL ENGINEER

For admission to Sibley College, see page 37; for tuition and fees in Sibley College, see page 44.

The undergraduate instruction for students in Sibley College leads to the degree of Mechanical Engineer, the requirement for which is the completion of one of the following curricula. For the requirements in military science and tactics and in physical culture see pages 164-165.

- 1. The curriculum of four years in mechanical and electrical engineering.
- 2. The curriculum of four years in subjects related to mining engineering.
- 3. The curriculum of five years in mechanical and electrical engineering.
- 4. The curriculum of five years in subjects related to mining engineering.
- 5. The curriculum of six years in Arts and Sciences and Mechanical Engineering.

1. The Curriculum of Four Years in Mechanical and Electrical Engineering

In the curriculum of four years leading to the degree of Mechanical Engineer, instruction is the same for all students during the first three years. In the fourth year, some opportunity is afforded for specializing in the different branches of mechanical and electrical engineering.

NOTE. In referring to courses the following abbreviations are used: Shop, S; Machine Design, D; Mechanics of Engineering, M; Power Engineering, P; Experimental Engineering, X; Electrical Engineering, E; Industrial Engineering, I.

Freshman Year

Course	No. Course	Hours 1st Term	Hours 2d Term
Analytic Geometry and Calculus.....	6	6	6
Chemistry	I	0	6
Physics	3, 8	6	2
Drawing and Desc. Geom.	D I, 2	3	3
Foundry	S3	2 or 0	0 or 2
Forge	S4	0 or I	I or 0
Engineering Principles	P I	I	I or 0
Military Drill.....	I	I	I

Sophomore Year

Mechanics of Engineering	M5, 6	5	5
Physics, Recitations.....	9	2	0
Physics, Laboratory.....	14	2	2
Electrical Engineering	E 5	0	2
Chemistry	6	0 or 5	5 or 0
Kinematics	D6	0	2
Drawing	D5, 7	3	3
Materials	X6	3 or 0	0 or 3
Pattern Making	S7	3 or 0	0 or 3
Military Drill.....	I	I	I

Junior Year

Course	No. Course	Hours 1st Term	Hours 2d Term
Heat-Power Engineering.....	P10	3	3
Electrical Engineering.....	E14	2	2
Electrical Engineering.....	E15	2	2
Mechanical Laboratory.....	X10, 11	3	3
Machine Design—(a) Drawing.....	D10	2	2
(b) Lectures and Recitations.....	D16	3	3
Machine Work.....	S10	2	2
Industrial Organization.....	I12	0	0
Hydraulics.....	M12	2	2

In the senior year the regular student must complete one of the options:

Option A: Senior Electrical Engineering Option:—

Power Plant Design.....	P20	3	3
Mechanical Laboratory.....	X 22	2	0
Economics.....	52	2	2
Electrical Machinery.....	E 20	2	2
Electrical Machinery.....	E 21	3	3
Electrical Design.....	E 22	2	2
Electrical Laboratory.....	E 28	4	4
Elective (or Thesis, X 32).....		2	2

Option B: Senior Heat-Power Engineering Option:—

Power Plant Design.....	P20	3	3
Mechanical Laboratory.....	X20, 21	3	3
Electrical Engineering.....	E 36	2 or 0	0 or 2
Electrical Engineering.....	E 37	0 or 2	2 or 0
Economics.....	52	2	2
Heat-Power Machinery Design.....	P 23	3	3
Drawing and Design.....	P 24	2	2
Gas Manuf. or 'Stm. Turbines.....	P28 or 25	0	2
Elective (or Thesis, X 32).....		4	2

Option C: Senior Structural and Plant Engineering Option:—

Power Plant Design.....	P 20	3	3
Mechanical Laboratory.....	X20, 21	3	3
Electrical Engineering.....	E 36	2 or 0	0 or 2
Electrical Engineering.....	E 30	0 or 2	2 or 0
Economics.....	52	2	2
General Engineering Design.....	D 22	2	2
Drawing and Design.....	D 23	3	3
Elective (or Thesis, X 32).....		4	4

Option D: Senior Ship Design and Construction Option:—

Power Plant Design.....	P20	3	3
Mechanical Laboratory.....	X20, 21	3	3
Electrical Engineering.....	E36	2 or 0	0 or 2
Electrical Engineering.....	E37	0 or 2	2 or 0
Economics.....	52	2	2
Ship Design.....	D25	3	3
Speed and Power of Ships.....	D26	0	2
Drawing and Computation.....	D27	3	3
Specifications, Contracts, etc.....	D28	2	0
Elective.....		0	2

Option E: Senior Industrial Engineering Option:—

Course	No. Course	Hours 1st Term	Hours 2d Term
Power Plant Design	P 20	3	3
Mechanical Laboratory	X20, 21	3	3
Electrical Engineering	E36	2 or 0	0 or 2
Electrical Engineering	E37	0 or 2	2 or 0
Industrial Administration	I20	2	2
Drawing and Design	I22	3	3
Safety Engineering and Fire Protection	I23	0	2
Accounting	58a	3	0
Electives		0	3

2. The Curriculum of Four Years in Subjects Related to Mining Engineering
Freshman Year

Analytic Geometry and Calculus	6	6	6
Chemistry, Introductory Inorganic	Chem. 1	6	0
Chemistry, Qualitative Analysis	" 7	0	6
Physics	Phys. 2, 7	5	3
Forge	S4	0	2
Military Drill	I	1	1

Sophomore Year

Mechanics of Engineering	M5, 6	5	5
Chemistry, Quantitative Analysis	Chem. 12	0	6
Physics Laboratory	Phys. 14	4	0
Crystallography	Geol. 12	3	0
Mineralogy	" 13	0	3
Dynamic and Historic Geology	" 1, 21	3	3
Drawing	D1, 2	3	3
Military Drill	I	1	1

Junior Year

Kinematics	D6	0	2
Drawing	D5, 7	3	3
Electrical Engineering	E5	0	2
Heat-Power Engineering	P10	3	3
Metallurgy of Iron and Steel	X 6	3	0
General Econ. Geology	Geol. 32	3	3
Mining of Mineral Deposits	" 34	3	3
Surveying	C.E. 10, 11	3	4
Summer Field Work in Mining	Geol. 39	3	0

Senior Year

Assaying	Chem. 18	3	0
Blowpipe Determination of Minerals	Geol. 14	1	0
Machine Design—			
(a) Drawing	D10	2	2
(b) Lectures and Recitations	D16	3	3
Mining Methods and Design	D39	2	2
Mechanical Laboratory	X10, 11	3	3
Hydraulics	M12	0	2
Examination of Mineral Deposits	Geol. 33	0	2
Electrical Engineering	E14	2	2
Electrical Engineering	E15	2	2
Machine Work	S10	0	2

3. The Curriculum of Five Years in Mechanical and Electrical Engineering

First Year

Course	No. Course	Hours 1st Term	Hours 2d Term
English	I	4	4
Advanced Algebra†	2	5	0
Solid Geometry†	I	0	3
Trigonometry†	3	0	3
Chemistry	I	0	6
Engineering Principles	PI	1	0
Forge Shop	S4	0	1
Foundry	S3	2	0
Elective in Arts and Sciences		5	0
Military Drill	I	1	1

Second Year

Analytical Geometry and Calculus	6	6	6
Chemistry	6	5	0
Physics	3	0	6
Drawing	DI, 2	3	3
Elective in Arts and Sciences		3	2
Military Drill	I	1	1

Third Year

Mechanics of Engineering	M5, 6	5	5
Physics, Recitations	8, 9	2	2
Physics, Laboratory	I4	2	2
Electrical Engineering	E5	0	2
Kinematics	D6	0	2
Drawing	D5, 7	3	3
Materials	X6	3	0
Pattern Making	S7	0	3
Elective in Arts		3	0

Fourth and Fifth Years

The fourth and fifth years are identical with the third and fourth years of the curriculum of four years.

4. The Curriculum of Five Years in Subjects Related to Mining Engineering

This curriculum leads to the degree of Mechanical Engineer, and it is possible for those pursuing it not only to complete the subjects listed in the curriculum of four years in Mining Engineering but also to take substantially all of the additional subjects given in the curriculum of four years in Mechanical Engineering.

5. The Curriculum of Six Years in Arts and Sciences and Mechanical Engineering

In accordance with the rules of the College of Arts and Sciences, qualified seniors in that college may take their senior year in Sibley College, receiving the degree of A.B. at the end of the year. If by their privilege of election of subjects in the College of Arts and Sciences, these seniors have during their first three years completed the required freshman subjects in engineering, they may thus, by the end of their fourth year of residence, complete the engineering subjects required in the sophomore year. The fifth year and the sixth year of residence, with registration in Sibley College, will then be the junior year and the senior year respectively of the curriculum of four years in Sibley College.

† If credited in this subject at the time of admission, an equivalent number of hours may be elected in some other subject.

ELECTIVES

Students having the necessary preparation and having the approval of their class adviser may take any of the subjects in the following lists. The choice of studies is not limited to those here listed; the student may, with the approval of his class adviser and of the department concerned, take any subject in any department in the University.

A. ELECTIVE SUBJECTS OPEN TO FRESHMEN

German, French, Spanish, Greek, Latin, English, Roman History, English History, History of Civilization, Bibliography, Music, Biology, Botany, Entomology, Zoology, Physiology, Photography, Agriculture, Law, Geology, Mining, Public Speaking, Surveying, Freehand Drawing and the freshman engineering subjects given on page 144.

B. GENERAL ELECTIVES

Differential Equations (Calculus), 41; Surveying (Trigonometry), C.E. 12; Spec. and Contracts (3 or 4), C.E. 90; Assaying (Chem. 6), Chem. 18; Adv. Quant. Anal. (Chem. 6), Chem. 14; Adv. Quant. Anal. Lectures (Chem. 6), Chem. 15; Qual. and Quant. Gas Anal. (Chem. 6), Chem. 19; Tech. Gas Anal. (Chem. 6) Chem. 20; Chemistry of Gases (Chem. 6), Chem. 49; Photometry and Illumination (Physics 14), Phys. 26; Photometry and Illumination (Physics 14); Phys. 43; Photography (2), Phys. 18; Elementary and Historic Geology, Geol. 1, 21; Bldg. Stone and Clay Products, Geol. 30; Engineering Geology, Geol. 31; Mineralogy (Chem. 1), Geol. 11; Mining of Mineral Deposits, Geol. 34; Economics, Elementary (2), 52 or 51; Economics: Accounting, Business Law, Corporations and Trusts, Money and Banking, Labor Problems, Railway Transportation, Public Utilities, Government Control of Industries, etc. (Econ. 51 or 52, is required for most of these); Aesthetics, Archeology, Astronomy, Ethics, Philosophy, Logic, Psychology, Military Science, and advanced courses in subjects given in List A, above.

C. TECHNICAL ELECTIVES FOR SENIORS ONLY

Thesis, X32; Steam Boiler Design, P30; Steam Turbines, P25; Gas Manuf. and Distribution, P28; Gas Power Machinery, P29; Advanced Heat-Power Engineering, P40; Refrigeration, P31; Motor Car Construction, P32; Heating and Ventilating, P33; Engineering Research, X30; Power Plant Testing, X31; Engineering Notes, D24; Speed and Power of Ships, D26; Advanced Designing, D40; Industrial Administration, I20; Safety Engineering and Fire Protection, I23; Advanced Industrial Engineering, I40; Central Stations, E 23; Elem. of Elect. Ry. Pract., E25; Wireless Telegraphy, E27; Special Elect. Eng. Problems, E33; Engineering Mathematics, E30; Hydraulic Turbines, M21; Railway Cons. and Maintenance, C.E. 63; Concrete Construction, C.E. 77; Alternating Currents, Phys. 33; Electrical Lab. Practice, Phys. 34; Sibley Journal Credit, X40.

SCHOLARSHIPS AND PRIZES

The Sibley Prize in Mechanic Arts, the Frank William Padgham Scholarship, the Fred Lewis Wilson Scholarship, and the Wurts Loan Fund, are awarded only to students in Sibley College; the Fuertes Memorial Prizes in Public Speaking are awarded only to students in the two colleges of engineering and in the College of Architecture. For these and for the prizes and scholarships that are open to all students of the University, see page 155.

SUMMER TERM

In the summer of 1918 instruction in Mechanical Engineering was provided in a term beginning May 27, 1918, and extending to September 18, 1918. Courses in this summer term were open to students who had completed the junior year. This arrangement was made to enable students to finish their college course and enter government service in February, 1919, instead of the following June.

COURSES OF INSTRUCTION

From two and one-half to three hours in shops, laboratories, computation work, or drawing count as one credit hour in the schedule.

DEPARTMENT OF MACHINE CONSTRUCTION

S. 3. **Foundry Work.** Freshmen. Either term, credit two hours. Messrs. VANDERHOEF and PATTERSON.

S. 4. **Forge Work.** Freshmen. Either term, credit one hour. Messrs. HEAD and BROOKS.

S. 7. **Pattern Making.** Sophomores. Either term, credit three hours. Prerequisite course S. 3. Messrs. HOOPER and BUSH.

S. 10. **Machine Work.** Juniors. Throughout the year, two hours credit a term. Prerequisite courses S. 3, 4, and 7. Professor WELLS and assistant.

DEPARTMENT OF MACHINE DESIGN

D. 1. **Drawing.** Required of freshmen. First term, credit three hours. Assistant Professor HAM and instructors.

D. 2. **Descriptive Geometry.** Required of Freshmen. Second term, credit three hours. Assistant Professor HAM and instructors.

D. 3. **Drawing.** For students registered for the degree of Bachelor of Chemistry. First term, credit three hours. Assistant Professor HAM and instructors.

D. 5. **Machine Drawing.** Sophomores. First term, credit three hours. Prerequisite courses D. 1 and 2. Assistant Professor ——— and instructors.

D. 6. **Kinematics.** Sophomores. Second term, credit two hours. Prerequisite courses D. 1 and 2, and must be taken with course D. 7. Assistant Professor ——— and instructors.

D. 7. **Kinematic Drawing.** Sophomores. Second term, credit three hours. Prerequisite courses D. 1 and 2, and must be taken with course D. 6. Assistant Professor ——— and instructors.

D. 10. **Drawing and Design.** Juniors. Throughout the year, credit two hours each term. Prerequisite courses D. 5, D. 6, D. 7, M. 5 and 6, and must be taken with course D. 16. Professors KIMBALL and ALBERT and Mr. GARNER.

D. 16. **Machine Design.** Juniors. Throughout the year, credit three hours a term. One lecture and two recitations a week. Prerequisite courses D. 5, 6, 7, M. 5 and 6, and must be taken with D. 10. Professors KIMBALL and ALBERT and Mr. GARNER.

D. 22. **General Engineering Design.** Required of seniors in Option C. Throughout the year, credit two hours a term. Prerequisite courses D. 10, D. 16, and P. 10, and must be taken with D. 23. Assistant Professor LEE and Mr. TOWNSEND.

D. 23. **Drawing and Design.** Nine hours of work a week throughout the year, credit three hours a term. Prerequisite Courses D. 10 and 16 and P. 10, and may only be taken in connection with D. 22. Assistant Professors LEE and TOWNSEND.

D. 24. **Engineering Notes.** Elective for seniors. Second term, credit two hours. Prerequisite courses D. 10 and 16. Professor McDERMOTT.

D. 25. **Ship Design.** Required of seniors in Option D. Lectures throughout the year, credit three hours a term. Prerequisite courses D. 10 and 16. Professor McDERMOTT.

D. 26. **Speed and Power of Ships.** Required of seniors in Option D. Second term, credit two hours. Prerequisites D. 10 and 16. Professor McDERMOTT.

D. 27. **Design and Drawing.** Required of seniors in Option D. Throughout the year, credit three hours a term. Must be accompanied by D. 25. Professor McDERMOTT.

D. 28. **Specifications, Contracts, etc.** Required of seniors in Option D. First term, credit two hours. Prerequisite Courses D. 10 and 16. Professor McDERMOTT.

D. 39. **Mining Methods and Designs.** Required of all seniors in mining; not open to others. Credit two hours a term. Professor KIMBALL.

D. 40. **Advanced Designing.** For graduates who have had the equivalent of D. 22 and D. 23, or of D. 25, 26, and 27. Professors KIMBALL, McDERMOTT, and ALBERT.

DEPARTMENT OF MECHANICS OF ENGINEERING

M. 5 and 6. **Mechanics of Engineering.** Sophomores. M. 5 in first term, M. 6 in second term. Credit five hours a term. Prerequisite course Mathematics 6. Professor WOOD, Assistant Professors GARRETT and SWITZER, and Messrs. CORNELL, HOTCHKISS, and PERKINS.

M. 12. **Hydraulics.** Juniors. Second term, credit two hours. Prerequisite courses M. 5 and 6. Assistant Professor SWITZER and Mr. PERKINS.

M. 21. **Hydraulic Turbines.** Elective. First term, credit two hours. Prerequisite course, M. 12. Assistant Professor SWITZER.

DEPARTMENT OF HEAT-POWER ENGINEERING

P. 1. **Engineering Principles.** Freshmen. Either term as assigned, credit one hour. Professor SMITH.

P. 10. **Elementary Heat-Power Engineering.** Required of all juniors. Throughout the year, credit three hours a term. Prerequisite courses Physics 8, 9, and 14, Chemistry 6, M. 5 and 6, and D. 5, 6, and 7. Professor ELLENWOOD and Mr. CLARK.

P. 11. **Heat Engines and Auxiliaries.** Required of C. E. seniors. Either term, credit three hours. Not open to Sibley students. Prerequisite courses Physics 2 and 7, (or the equivalent), Chemistry 1, C.E. 20. Professor ELLENWOOD.

P. 20. **Power Plant Design.** Required of all regular seniors. Throughout the year, credit three hours a term. Prerequisite course P. 10. Professor SMITH, Assistant Professor MATTHEWS.

P. 21. **Engineering Computations.** Elective. First term, credit two hours. Prerequisite Mathematics 6.

P. 23. **Heat-Power Machinery Design.** Required of seniors in Option B and not open to others. Throughout the year, credit three hours a term. Prerequisite courses D. 10, D. 16 and P. 10, and must be accompanied by Course P. 24. Professor BARNARD.

P. 24. **Designing and Drawing.** Required of seniors in Option B, and not open to others. Throughout the year, credit two hours a term. Prerequisite courses D. 10, D. 16 and P. 10 and must be accompanied by P. 23. Professor BARNARD.

P. 25. **Steam Turbines.** Senior elective. Required of those taking the design of steam engines in P. 24. Second term, credit two hours. Prerequisite course P. 10. Professor BARNARD.

P. 28. **Gas Manufacture and Distribution (General).** Seniors. Required of those taking design of internal combustion engines in P. 24. Second term, credit two hours. Prerequisite courses D. 10, D. 16, and P. 10.

P. 29. **Gas Power Machinery (General).** Seniors. First term, credit two hours. Not open to students taking Option B. Prerequisite courses D. 10, D. 16, and P. 10.

P. 30. **Steam Boiler Design.** Seniors. First term, credit two hours. Prerequisite courses D. 10, D. 16, and P. 10. Professor BARNARD.

P. 31. **Refrigeration and Refrigerating Machinery.** Elective. Second term, credit two hours. Prerequisites P. 10, D. 10, 16.

P. 32. **Motor Car Construction.** Elective. First term, credit two hours. Prerequisites P. 10, D. 10, 16. Assistant Professor UPTON.

P. 33. **Heating and Ventilating.** Elective. Second term, credit two hours. Prerequisites P. 10, D. 10, 16. Assistant Professor SAWDON.

P. 40. **Advanced Heat-Power Engineering.** Elective for those who have completed the equivalent of the design subjects in senior Option B. Professors SMITH and BARNARD.

P. 41. **Readings in English Literature.** Open to juniors and seniors in Sibley College. Two readings a week from Thanksgiving to Easter recess; one hour credit. Professor SAMPSON.

DEPARTMENT OF EXPERIMENTAL ENGINEERING

A. Mechanical Laboratory Division

X. 6. **Manufacture of Engineering Materials.** Required of sophomores. First or second term, credit three hours. Prerequisite course Chemistry 1. Professor DIEDERICHS.

X. 10. **Mechanical Laboratory—Properties of Engineering Materials.** Juniors. First term, credit three hours. Prerequisite courses X. 6, M. 5 and 6. Assistant Professor UPTON.

X. 11. **Mechanical Laboratory—Introductory Experimental Engineering.** Juniors. Second term, credit three hours. Prerequisite courses M. 5 and 6, Chem. 6, Phys. 3. Assistant Professor UPTON.

X. 12. **Mechanical Laboratory.** For students in Chemistry course. Second term only, credit four hours. Prerequisite courses M. 5, and Phys. 10 and 14. Assistant Professor GAGE.

X. 20. **Mechanical Laboratory—Experimental Engineering.** M. E. Seniors. First term, credit three hours. Prerequisite courses X. 10, 11, P. 10. Assistant Professor GAGE.

X. 21. **Mechanical Laboratory—General Experimental Engineering.** Seniors in M.E. Second term, credit three hours. Assistant Professor GAGE.

X. 22. **Mechanical Laboratory.** Required of Seniors in the Electrical Engineering Option. First term, credit two hours. Prerequisites X. 10, 11 and P. 10. Assistant Professor GAGE.

X. 23. **Engine Handling.** Elective. Second term, credit three hours. Prerequisite X. 11 and either X. 20 or X. 22. Open also to those who have had X. 12 or its equivalent. Assistant Professor GAGE.

B. Engineering Research Division

X. 30. **Engineering Research.** Elective. Either or both terms; credit one hour for forty hours of actual work. Open to a limited number of seniors and graduates. Professor DIEDERICHS, Assistant Professors SAWDON and UPTON.

X. 31. **Power Plant Testing.** Elective. Either term, credit one hour for forty hours of actual work. Open to a limited number of seniors. Professor DIEDERICHS, Assistant Professors SAWDON and UPTON.

X. 32. **Thesis.** Senior elective. Either or both terms, maximum total credit eight hours. Professor DIEDERICHS, Assistant Professors SAWDON and UPTON.

X. 40. Sibley Journal Credit. Undergraduate members of the Sibley Journal Board may receive not to exceed two hours of University credit in each term of their senior year (i.e. a maximum credit of four hours) for work satisfactorily done for The Sibley Journal, provided they are elected to the Board in their Sophomore year, or before, and continue as active members on it to the end of the term in which credit is desired.

DEPARTMENT OF ELECTRICAL ENGINEERING

E. 5. Introductory Course in Electrical Engineering. Required of all sophomores. Second term only, credit two hours. Prerequisite courses Physics 3 and Math. 6. Professor GRAY.

E. 12. Essentials of Electrical Engineering. Required of seniors in the civil engineering and chemistry courses. First term only, credit four hours. Assistant Professor BALLARD and assistants.

E. 14. Elementary Electrical Engineering. Required of all juniors in the regular course, and of seniors in mining. Throughout the year, credit two hours a term. Prerequisite courses Physics 8, 9, 14, M. 5, 6, E5. Must be accompanied by E. 15. Professor GRAY and Mr. BASON.

E. 15. Elementary Electrical Engineering. Required of all juniors in the regular course, and of seniors in mining. Throughout the year, credit two hours a term. Prerequisite courses Physics 8, 9 and 14, M. 5 and 6. Must be accompanied by E. 14. Professor GRAY and instructors.

E. 20. Theory of Electrical Machinery. Required of seniors in Option A. Throughout the year, credit two hours a term. Prerequisite courses E. 14 and 15. Professor KARAPETOFF.

E. 21. Characteristics of Electrical Machinery. Required of seniors in Option A. Throughout the year, credit three hours a term. Prerequisite courses E. 14 and 15. Professor KARAPETOFF, Assistant Professor PERTSCH, and assistant.

E. 22. Electrical Design. Required of seniors in Option A. Throughout the year, credit two hours a term. Must be accompanied by E. 20 and E. 21. Professor GRAY and Assistant Professor PERTSCH.

E. 23. Central Stations. Elective for seniors in E. E. Second term only, credit two hours.

E. 25. Elements of Electric Railway Practice. Elective for seniors. Second term only, credit two hours. Prerequisite courses E. 14 and 15. Mr. CHAMBERLAIN.

E. 27. Wireless Telegraphy and Telephony. Elective for seniors in electrical engineering. Second term only, two hours credit. Prerequisite courses first term of E. 20, E. 21, and E. 28. Assistant Professor BALLARD.

E. 28. Senior Electrical Laboratory. Required of seniors in electrical engineering (Option A). Throughout the year, credit four hours a term. Must be accompanied by E. 20 and E. 21.

E. 30. Engineering Mathematics. Elective. Open to seniors and graduate students only. Throughout the year, credit two hours a term. Professor KARAPETOFF and assistant.

E. 33. Special Electrical Engineering Problems. First or second term or both. Credit two or more hours. Open to seniors. Professor KARAPETOFF, and other instructors as required.

E. 36. Electrical Engineering for M. E. Seniors. Required of Sibley seniors who take Options B to E inclusive. Not to be taken simultaneously with E. 37. Two hours credit; repeated in the second term. Prerequisite courses X. 11, E. 14 and E. 15. Professor GRAY.

E. 37. Electrical Engineering for M. E. Seniors. Required of Sibley seniors who take options B to E inclusive. Not to be taken simultaneously with E. 36. Two hours credit; repeated in the second term. Prerequisite courses X. 11, E. 14 and E. 15.

Seminary in Electrical Engineering. For seniors and graduate students. No credit. Conducted by Professors GRAY and KARAPETOFF.

[NOTE.—For other electrical and illumination courses see under Physics in the Announcement of Courses in the College of Arts and Sciences.]

DEPARTMENT OF INDUSTRIAL ENGINEERING

I. 12. Industrial Organization. Required of all juniors in Sibley College and not open to freshmen or sophomores. Open to juniors and seniors of other colleges. First term, credit two hours. Professor KIMBALL and assistant.

I. 20. Industrial Administration. Required of all seniors in Option E. Elective for seniors pursuing other options. Credit two hours a term. Prerequisite course I. 12. Professor KIMBALL and assistant.

I. 22. Drawing and Design. Required of all seniors in Option E. Credit three hours a term. Prerequisite courses D. 10 and D. 16, and must be accompanied by I. 20. Professor ALBERT and assistant.

I. 23. Safety Engineering and Fire Protection. Required of all seniors in Option E. May be elected by seniors pursuing other options. Two hours credit. Prerequisite course I. 12. Professor WELLS.

I. 40. Advanced Industrial Engineering. Open to graduates and seniors who have completed the equivalent of I. 20 and 22. Professors KIMBALL, WELLS, and ALBERT.

THE UNIVERSITY LIBRARIES

Willard Austen, Librarian.

A. C. White, Assistant Librarian.

G. L. Burr, Librarian of the President White Library.

Haldor Hermannsson, Curator of the Icelandic Collection.

Mary Fowler, Curator of the Dante and Petrarch Collections.

E. R. B. Willis, Superintendent Readers' Division, General Library.

E. E. Willever, Librarian of the Law Library.

W. W. Ellis, Librarian of the Agricultural College Library.

The University Libraries comprise the General Library of the University, the Seminary Libraries in the general library building, the Architectural Library, the Chemical Library, the Sibley Engineering Library, the Civil Engineering Library, the Law Library, the Flower Veterinary Library, the Barnes Reference Library, the Goldwin Smith Hall Library, the Stimson Hall Medical Library, and the Library of the New York State College of Agriculture. The total number of classified volumes and pamphlets in them is now about five hundred and sixty thousand. The number of periodicals, transactions, and other serials, currently received, is over two thousand and of most of these complete sets are on the shelves.

The General Library Building, is the gift of the late Hon. Henry W. Sage. The general reading rooms contain accommodations for two hundred and seventy readers, and the open book cases around the rooms provide shelf-room for twelve thousand volumes. In the tower are the great bell of the University, the gift of Mrs. Mary White, and the chime of bells, the gift of Mrs. Jennie McGraw Fiske.

The income of an endowment fund of three hundred thousand dollars, given by the late Henry W. Sage in 1891, is devoted to the purchase of books and periodicals. The free income of an endowment fund of five hundred and three thousand dollars, received in 1906 by the bequest of the late Willard Fiske, is to be expended for the uses and purposes of the Library, with specific provision for the maintenance and increase of the Icelandic and the Italian collections.

Supplementing the general card catalog of the library, there have been issued printed catalogs of the President White collections on the Protestant Reformation (1889) and the French Revolution (1894) and of the Rhaeto-Romanic collection (1894), the Dante collection (1900), the Icelandic collection (1914), the Petrarch collection, and the Runic collection.

The library is primarily for the use of University officers and students. Books not held in reserve for special reasons are allowed to go out for home use to all registered borrowers. Cards of admission to the shelves in the stack-rooms, and to the White Historical Library, will be issued for a limited time to students for the purposes of consultation and research, when their work is of such a nature as to require access to the book shelves.

Among the more important special collections in the General Library may be mentioned:

THE ANTHON LIBRARY, of nearly seven thousand volumes, the collection made by the late Professor Charles Anthon, of Columbia College, in the ancient classical languages and literatures, besides works in history and general literature.

THE BOPP LIBRARY, of about twenty-five hundred volumes, relating to the oriental languages and literatures, and comparative philology, being the collection of the late Professor Franz Bopp of the University of Berlin.

THE GOLDWIN SMITH LIBRARY, of thirty-five hundred volumes, comprising chiefly historical works and editions of the English and ancient classics, presented to the University in 1869 by the late Professor Goldwin Smith, and increased during later years by the continued liberality of the donor.

THE PUBLICATIONS of the Patent Office of Great Britain, about three thousand volumes.

THE WHITE ARCHITECTURAL LIBRARY, a collection of over twelve hundred volumes relating to architecture and kindred branches of science, given by the late President White.

THE KELLY MATHEMATICAL LIBRARY, comprising eighteen hundred volumes, and seven hundred tracts, presented by the late Hon. William Kelly, of Rhinebeck.

THE SPARKS LIBRARY, being the library of Jared Sparks, sometime President of Harvard University, consisting of upward of five thousand volumes and four thousand pamphlets, relating chiefly to the history of America.

THE MAY COLLECTION, relating to the history of slavery and anti-slavery, the nucleus of which was formed by the gift to the library of the late Rev. Samuel J. May, of Syracuse.

THE SCHUYLER COLLECTION of folk-lore, Russian history and literature, presented by the late Hon. Eugene Schuyler in 1884.

THE PRESIDENT WHITE HISTORICAL LIBRARY, of about twenty-three thousand volumes and pamphlets, the gift of the late President White, received in 1891, especially rich in the primary sources of history, and containing notable collections on the period of the Reformation, on the English and French Revolutions, on the American Civil War, and on the history of superstition.

THE SPINOZA COLLECTION, numbering four hundred and fifty volumes, presented in 1894, by the late President White.

Four remarkably rich collections given by the late Willard Fiske, comprising the **DANTE COLLECTION**, containing over eight thousand volumes, the **PETRARCH COLLECTION**, containing about four thousand volumes, the **RHAETO-ROMANIC COLLECTION**, containing about thirteen hundred volumes, and the **ICELANDIC COLLECTION**, containing over fifteen thousand volumes.

THE ZARNCKE LIBRARY, containing about thirteen thousand volumes and pamphlets, especially rich in Germanic Philology and literature, purchased and presented in 1893 by William H. Sage.

THE HERBERT H. SMITH COLLECTION of books relating to South America, purchased in 1896.

A valuable collection of books on French and Italian Society in the 16th and 17th centuries, presented by Professor T. F. Crane in 1896.

THE FLOWER VETERINARY LIBRARY, the gift of ex-Governor Flower to Cornell University, for the use of the State Veterinary College, in 1897.

THE EISENLOHR LIBRARY, containing about one thousand volumes of Egyptology and Assyriology purchased and presented in 1902 by A. Abraham.

THE BAYARD TAYLOR correspondence and journals and his collection of Goethe literature, presented to the Library, in 1905 by Mrs. Marie Taylor.

THE ANGLO-SAXON COLLECTION and the **COWPER COLLECTION** formed by the late Professor Hiram Corson, bequeathed to the Library, and received in 1911.

THE ENGLISH COLLECTION presented by Professor J. M. Hart in 1914.

THE COLLECTION OF JAPANESE LITERATURE presented to the University in 1915 by Dr. William Elliot Griffis.

THE GUTEAU INSURANCE LIBRARY purchased in 1916.

THE JAMES VERNER SCAIFE COLLECTION of U. S. Civil War literature given by Mr. Scaife of the class of 1889. This collection which was received in 1919 combines with the President White books in the same field to form a strong collection.

These collections, and others such as these, making possible an exhaustive study of certain fields, are of the greatest service in research work. A similar purpose is served by the seminary rooms of the University Library. Thus, for the study of English, of the classical languages, of the Germanic and Romance languages, of philosophy, of politics and economics, of American and of European history, there have been provided in the library building six of these research rooms, each equipped with a carefully chosen body of reference books, to which

advanced students in these fields have access. In connection with the scientific and technical laboratories similar collections have been formed and well supplied with reference books, standard works, and sets of periodicals, conveniently arranged for study and research.

The following are the more important divisions of the University library kept outside the main library:

The Goldwin Smith Hall Library, in Goldwin Smith Hall, is distinctly a reference collection, numbering now over two thousand volumes. It consists chiefly of books used in connection with the undergraduate work in humanities, providing in certain cases many copies of the books most in demand in the larger classes.

The Law Library occupies the third floor of Boardman Hall. It now contains about fifty thousand volumes, and includes the library of the late Nathaniel C. Moak, presented in 1893 by Mrs. A. M. Boardman and Mrs. Ellen D. Williams, as a memorial to Judge Douglas Boardman, the first Dean of the College of Law. In reports to the Federal Courts, reports of the several American state jurisdictions, and in English, Scotch, Irish, and Canadian reports, the law library is practically complete to date. The library also possesses complete sets of all the leading law periodicals in English.

The Barnes Reference Library for Biblical Study was presented to the University by the late Alfred C. Barnes for the use of the Cornell University Christian Association, and occupies a room in Barnes Hall. The collection now numbers two thousand two hundred and twenty-nine volumes, all fully cataloged as part of the University Library. After the death of the donor his children gave to the University, for the maintenance and increase of the collection, an endowment of five thousand dollars.

The Flower Veterinary Library, now numbering about four thousand eight hundred volumes, owes its formation to the late Rowsell P. Flower who gave, in 1897, five thousand dollars to Cornell University to establish a veterinary library, for the use of the State Veterinary College. In 1901, Mrs. Flower gave to the University ten thousand dollars for an endowment fund, the annual income of which is to be used for this library.

The Stimson Hall Medical Library was established in 1903 by gifts and by class memorial subscriptions. It now contains over thirteen hundred volumes.

The Medical College in New York City has its own library containing about seven thousand bound volumes and a large number of reprints and monographs including the Birch-Hirschfeld bound collection. The library receives about one hundred current periodicals which include nearly all the more important German, French, English and Italian journals in the field of medical science.

The Agricultural College Library, comprising the college library, the Forestry Library, the Entomological Collection, and the Craig Horticultural Library, consists of some twelve thousand volumes.

SCHOLARSHIPS AND PRIZES

STATE TUITION SCHOLARSHIPS

(Awarded by New York State)

Under the law of the State of New York the Commissioner of Education is empowered to award annually a number of free scholarships in Cornell University equal to the number of Assembly districts in the State of New York. Each scholarship entitles the holder to free tuition for four years beginning in the September immediately following the award of the scholarship.

All scholarship holders must satisfy the regular requirements for admission to one of the colleges of the University.

Holders of State Scholarships are notified that failure to register before the close of the last registration day for each term involves the severance of their connection with the University and consequently the forfeiture of their scholarships. The Commissioner of Education fills all vacancies in scholarships.

A State Scholarship holder after regular registration at the University, may receive a leave of absence for the purpose of earning necessary funds to defray his living expenses at the University. The total period of such leave of absence without forfeiture of the scholarship is two years.

Every person who shall have entered the military or naval service of the United States since April 6, 1917, or who shall hereafter enter such service during the present war, and who at the time of such entrance held a State scholarship in Cornell University and was exercising the rights and privileges thereunder or held such scholarship under a leave of absence granted pursuant to subdivision 6 of section 1037 of the Education Law, may reassume such scholarship and exercise and enjoy all rights and privileges thereunder, at any time within one year after the termination of such war.

For particulars concerning the award of State Scholarships, application should be made to the Commissioner of Education, Albany, N. Y.

STATE UNIVERSITY SCHOLARSHIPS

Known at Cornell as the "State Cash Scholarships"

(Awarded by New York State)

Under the law of the State of New York (Chapter 292, Laws of 1913), State Scholarships have been established in the several counties of the State, to be maintained by the State as provided by law. Five such scholarships are to be awarded each county annually for each assembly district therein. Each such scholarship will entitle the holder thereof to the sum of one hundred dollars for each year of his attendance upon an approved college in this State during a period of four years. A person who receives such scholarship is not restricted in his choice of the college which he desires to attend, or as to the course of study which he proposes to pursue; provided, that no such scholarship shall include professional instruction in law, medicine, dentistry, veterinary medicine, or theology, except so far as such instruction is within a regularly prescribed course of study leading to a degree other than in one of the above named professions; and provided further, that the college selected by the person entitled to such scholarship is situated within the State of New York, and is incorporated as a college and authorized under the laws of this State and the rules of the Regents of the University to confer degrees.

University scholars, absent because of the performance of military service or of agricultural or industrial service are entitled to an extension of the period covered by their scholarships upon presentation of evidence satisfactory to the Commissioner of Education that they have been engaged in such service. In no case shall a scholar be entitled to receive more than the sum of one hundred dollars each year for a period of four years to aid him in the completion of a college education.

For particulars in regard to the awarding of State Scholarships, application should be made to the Commissioner of Education, Albany, New York.

UNIVERSITY UNDERGRADUATE SCHOLARSHIPS

(Awarded by the University)

Eighteen University Undergraduate Scholarships, each continuing for two years and of an annual value of \$200, are offered each year to members of the incoming freshman class. The award is made on the basis of a special competitive examination held in Ithaca in September between the period of the entrance examinations and the opening of the University.

Every candidate for such a scholarship must have satisfied the entrance requirements for one of the colleges of the University.

The University Undergraduate scholarships will be awarded on the basis of examinations in three of the eight following subjects:

(a). English. Entrance requirement. (b). Greek. Greek grammar and composition; translation at sight of simple prose. (c). Latin. Latin grammar and Caesar; composition and Cicero; Vergil. (d). French. Third year French. (e). German. Third year German. (f). Spanish. Third year Spanish. (g). Elementary mathematics. Elementary Algebra; intermediate algebra; plane geometry. (h). Advanced mathematics. Solid geometry; advanced algebra; and plane trigonometry.

In choosing three of these eight subjects, every candidate must take English and at least one of the other five languages; and any candidate who does not select either Latin or Greek must take advanced mathematics.

No scholarship will be awarded to any candidate who is reported markedly deficient in any subject in which he is examined, and the right is reserved to fill fewer than eighteen scholarships in the absence of a sufficient number of duly qualified candidates.

Before the scholarships are awarded, every candidate must indicate the college and, if several curricula with diverse entrance requirements are offered in that college, the curriculum in which he intends to register. In order to hold a scholarship, if it be awarded to him, he must register in that college or curriculum; and he will forfeit his right to the scholarship, if he transfers to any other college or curriculum, unless, at the time when he was admitted to the University, he had satisfied, as shown by the records of the University, all the entrance requirements for the college or the curriculum to which he transfers.

All persons shall be debarred from the competition for these scholarships who have participated in any previous competition for the same, or have been previously registered in this University (including the Summer Session) or in any other university or college.

The moneys due on these scholarships are paid at the office of the Treasurer of the University in two equal payments, on the 20th of February and the 25th of June, but no scholarship holder is entitled to receive his semi-annual payment until the Scholarship Committee has examined and approved the holder's record for the preceding term, and until the chairman of the Scholarship Committee has certified that the record of the holder is satisfactory.

The special examinations for these scholarships begin on the first day of registration in September. Permits to take the examinations will be issued by the Registrar by mail on application, provided the candidate has satisfied all the entrance requirements and provided the application is accompanied by a statement giving the name of the school at which the candidate was prepared, the name of the principal, and the college degrees held by the principal.

SPECIAL UNDERGRADUATE SCHOLARSHIPS

The Frank William Padgham Scholarship. This scholarship, founded in 1892 by Amos Padgham of Syracuse, New York, in memory of his son, Frank William Padgham, a graduate of Sibley College of the class of 1888, entitles the holder to free tuition and fees in the regular curriculum in Sibley College of Mechanical Engineering. It cannot be held in connection with a New York State Scholarship. The Frank William Padgham Scholarship will be awarded to the candidate who has had his preparatory education wholly or in part in the public schools of Syracuse, New York, and who, having been admitted to the regular

curriculum in Sibley College, shall pass the best examination in a competitive examination on mathematics (solid geometry, advanced algebra, and plane trigonometry) and on two of the following: 1. third year German; 2. third year French; 3. English. Of these subjects the candidate must take three including mathematics. The examination for the Padgham Scholarship is held at the same time as the University Undergraduate Scholarship Examinations.

State Grange Scholarships in Agriculture. At its annual meeting in February, 1914, the New York State Grange adopted a resolution whereby \$600 is to be given to members of the Order in the form of twelve scholarships in the winter courses in agriculture in Cornell University. The scholarships are each of the value of \$50, to be awarded to men or women who attain the highest standing in competitive examinations. The candidate should apply to the Master of Pomona Grange in his home county, or to the Deputy in counties which have no Pomona Grange.

Boardman Senior Law Scholarship. A Senior Law Scholarship of the value of one hundred dollars, the gift of Judge Douglass Boardman, the first dean of the College, is awarded annually in June to the junior who has, in the judgment of the Faculty, done the best and most satisfactory work in law subjects to the end of his junior year. It is available during the senior year and is payable in the same way as are other University undergraduate scholarships. This scholarship may be forfeited in case the Faculty is convinced that the holder has not maintained a high standard of work, or has been guilty of any conduct unbecoming the holder of such a scholarship.

Eudorus C. Kenney Scholarships. Under the will of Eudorus C. Kenney, of the class of 1882, his residuary estate was left to Cornell University, the net income to be used for the establishment of scholarships. The amount of the foundation is about \$40,000. Two scholarships, of the annual value of \$250 each, are awarded each year for a period of four years to applicants entering the university who are bona fide residents of the town of Truxton, Cortland County, New York. Such applicants shall be recommended by a committee consisting of the Principal of the Truxton Public School, the Superintendent of Schools for the district including Truxton, and the Supervisor for the Town of Truxton, the recommendation to be made and certified to the President of the University on or before September 15 of each year. The President shall award the scholarship and certify the award to the Treasurer and the Secretary of the University Faculty. In case of a vacancy in any scholarship the value of the scholarship may be awarded by the Faculty Committee on Scholarships in such manner as they may deem best.

Fraser Scholarships. Two scholarships of the value of \$100 and \$50, respectively, the gift of an alumnus of the College of Law, in memory of Alexander Hugh Ross Fraser, late librarian of the College are awarded annually about the beginning of the college year to seniors whose law study has been done entirely in Cornell University. They are awarded to students who have most fully evidenced high qualities of mind and character by superior achievement in scholarship and by those attributes of manliness which earn the commendation of teachers and fellow students. The award is made upon recommendation of the senior class by vote from a list of members submitted by the Faculty as eligible by reason of superior scholarship. The holder of the Boardman Scholarship is not eligible.

The Roberts Scholarship Fund, a gift of the late Dr. Charles H. Roberts, of Oakes, Ulster County, New York, provides five annual scholarships. As expressed by the founder, the purpose of these scholarships is to furnish financial assistance to students in the College of Agriculture, who are of good moral character, who show native ability, tact, and application, and who are in need of such assistance. Preference is given to students who come from rural districts. The award is made after the close of the first term of each year. The value of each scholarship is \$240.

The Buffalo Alumni Association Scholarship of the annual value of \$200, for students who are residents of Erie or Niagara County, New York. Cornell University is not responsible for the awarding of this scholarship.

The Student Fund of the Cornell Club of Rochester provides a loan of the annual value of \$200 as a maximum. The recipient must be an upperclassman, must have had at least one year of residence at Cornell University, and must be eligible to membership in the Cornell Club of Rochester, New York. Cornell University is not responsible for the award or the payment of this scholarship.

The Fred Lewis Wilson Scholarship. The sum of approximately \$4,000 was bequeathed to Cornell University by Mrs. Mary Northrup Wilson to found and perpetuate a scholarship in honor of her son, Fred Lewis Wilson, who was graduated from Sibley College of Mechanical Engineering with the class of 1892. This scholarship, of the value of \$192, is awarded, for a period of not more than two years, to undergraduates who have been at least one year in the University. The award is made by a committee consisting of the President of the University and the Director of Sibley College, and one other person, chosen by them. In awarding the scholarship consideration is given to scholarship, character, probable usefulness in the world at large, proficiency in mechanic arts, and financial need.

For scholarships and fellowships in the Graduate School, see page 49.

PRIZES

For information concerning the award of the following prizes, the pamphlet on Prize Competitions should be consulted.

The Woodford Prize, founded by the Hon. Stewart Lyndon Woodford, is of the value of one hundred dollars and will be given annually for the best English oration, both matter and manner of delivery being taken into account. The prize is in the form of a gold medal, but the winner may, if he chooses, receive instead one hundred dollars in money. Graduate students may not compete for this prize.

The '86 Memorial Prize, the income of a sum of money left as a memorial by the class of 1886, and amounting to eighty-six dollars annually, is an undergraduate prize in declamation to be awarded at a public contest held in May of each year.

The '94 Memorial Prize, the income of a fund established by the class of 1894 and amounting to about ninety-four dollars annually, is an undergraduate prize in debate to be awarded at a public contest held in January of each year.

The Barnes Shakespeare Prize. The Shakespeare Prize, founded in 1887 by Mrs. Alfred Smith Barnes, of Brooklyn, consists of about fifty dollars, the annual income from her gift of one thousand dollars. This prize is open only to undergraduate students.

The Guilford Essay Prize, founded in 1902 by the late James B. Guilford to promote "a high standard of excellence in English prose composition," consists of about one hundred and fifty dollars, the annual income from his bequest of three thousand dollars. This prize is open only to undergraduate students.

The J. G. White Prizes in Spanish. Through the generosity of Mr. James Gilbert White (Ph.D., Cornell, '85), three prizes, each of the value of one hundred dollars, are offered annually to English speaking students for proficiency in Spanish and to Spanish speaking students for proficiency in English. These prizes are open only to undergraduate students.

The Corson French Prize, founded in 1902 by Professor Hiram Corson in memory of his wife, Caroline Rollin Corson, consists of a gold medal of the value of fifty dollars to be awarded annually for the best essay on a subject in either French philology or literature. If the winner so desires, he may receive the value of the prize in money. Competition for this prize is open to all students.

The Corson Browning Prize, founded in 1902 by Professor Hiram Corson consists of a gold medal of the value of fifty dollars, to be awarded annually for the best competitive essay on Robert Browning. If the winner so desires, he may receive the value of the prize in money. Competition for this prize is open to juniors, to seniors, and to graduate students.

The Luana L. Messenger Memorial Prize, the annual income of a fund of five thousand dollars, founded by Mr. Hiram J. Messenger, will be awarded in accordance with the terms of the gift, to that student of the University who submits the essay "giving evidence of the best research and most fruitful thought in the field of human progress or the evolution of civilization during some period in human history or during human history as a whole."

The Sherman-Bennett Prize was founded by Philo Sherman-Bennett of New Haven, who, by provision of his will, bequeathed to William J. Bryan, of Lincoln, Nebraska, a fund to found prizes in twenty-five colleges or universities to be selected by him. The prize consists of the income of four hundred dollars, and is awarded "for the best essay discussing the principles of free government." Competition is open to all students of the University.

The Frances Sampson Fine Arts Prize. This prize, founded in 1909 by Professor Martin Sampson in memory of his wife Frances Van Rensselaer Sampson is awarded "to that student in the University who shows the most intelligent appreciation of the graphic and plastic arts and architecture." The prize is not given for practical proficiency in painting, drawing, or designing, but for natural or acquired ability to appreciate artistic beauty. The prize, of about thirty dollars to be expended in books or reproductions, is awarded some time in April under regulations administered by the Professor of Esthetics.

The J. T. Morrison Prize, founded by J. T. Morrison, of Ithaca, and consisting of a gold medal of the value of one hundred dollars or of one hundred dollars in cash at the option of the successful competitor, will be given annually for the best original poem, or poems, matter and manner of delivery being taken into account. This prize is not open to graduate students.

The Horace K. White Prizes, established by Horace K. White, of Syracuse are awarded annually to the most meritorious students in the graduating class of the New York State Veterinary College, as follows: to the first in merit, fifteen dollars; to the second in merit, ten dollars.

Sibley Prizes in Mechanic Arts. Under the gift of the Hon. Hiram Sibley, made in 1884, the sum of one hundred dollars will be awarded annually to those students in Sibley College who shall, in the opinion of the Faculty of that institution show the greatest merit in Sibley College work.

The Fuertes Medals, two gold medals established by Professor E. A. Fuertes, each of the value of one-half the amount of the income provided by the endowment fund, will be awarded under the following conditions:

One of these medals will be awarded annually to the student in the College of Civil Engineering who shall be found, at the time of graduation, to have maintained the highest scholarship in the courses of his college, provided he has been in attendance in the University for at least two years; and the other medal will be awarded annually to a graduate of the College of Civil Engineering for a meritorious paper tending to advance the scientific or practical interests of the profession of civil engineer.

The Clifton Beckwith Brown Memorial Medal was established by John Harkness Brown in memory of his brother Clifton Beckwith Brown, killed on the field of battle at San Juan Hill. A silver replica is awarded to the senior in the College of Architecture attaining the highest standing in design during his senior year, and a bronze replica to the senior taking second place. These medals however, are not awarded solely for order of merit; the award is not made unless the standard reached in design is considerably higher than that required for graduation.

The Charles Goodwin Sands Memorial Medal, founded by the family of Charles Goodwin Sands of the class of '90, is awarded for designs of exceptional merit presented in the regular competitions in the College of Architecture. The medal drawings are ranked as first and second medal drawings, according to merit. The author of a first medal drawing will receive a silver replica and the

author of a second medal drawing a bronze replica of the medal. The award is for merit alone and while the medal is occasionally won by undergraduates, the standard is such that the honor of winning the first medal usually falls to graduate students.

The Eastman Prizes for Public Speaking. With the object of developing qualities of personal leadership in rural affairs, A. R. Eastman of Waterville, New York, has established a fund to provide two annual prizes, one of \$100 and one of \$20, for public speaking on country life subjects. Competition is open to any regular or special student in the College of Agriculture.

The John Metcalfe Polk Prizes. In memory of John Metcalfe Polk, an instructor in the Medical College, who graduated from the Medical Department of Cornell University on June 7, 1889, and died on March 29, 1904, three prizes aggregating five hundred dollars will be presented at each commencement to members of the graduating class who have completed the full course of study in Cornell University Medical College. These prizes will be awarded as follows: to the student having the highest standing, three hundred dollars; to the student having the second highest standing, one hundred and twenty-five dollars; to the student having the third highest standing, seventy-five dollars.

The Dana Prizes. Two prizes, one of fifty dollars and another of twenty-five dollars, are offered by Professor Charles Loomis Dana to the two students of the graduating class of the Medical College, to be designated by him, who make the best reports of neurological cases seen during the course, provided that the reports submitted possess sufficient merit to warrant the award.

The Hollingworth Honorarium for Research. An honorarium of fifty dollars for advanced work or research in pathology and bacteriology, established by Dr. W. G. Hollingworth of Utica, is awarded to a senior in the Veterinary College on his general standing in the work of the first two years and his proficiency in the first courses in pathology and bacteriology.

The Whiting Prizes. Two prizes, the first of fifty dollars, the second of twenty-five dollars, are offered by Professor Frederick Whiting to the two students of the graduating class of the Medical College, to be designated by him, who make the best record in practical and theoretical work in otology.

The Fuertes Memorial Prizes in Public Speaking were founded by Charles H. Baker, a graduate of the College of Civil Engineering of the class of 1886. Three prizes, one of one hundred twenty-five dollars, one of thirty-five dollars, and one of twenty dollars, are awarded annually to members of the junior and senior classes in the Colleges of Engineering and Architecture, for proficiency in public speaking.

The C. Lathrop Pack Prize is a gift of \$500 the interest of which is to be used by the Faculty of the Department of Forestry "in the interests of forestry."

The Jane Miller Prize of fifty dollars is awarded to the student or students having the highest standing in the subject of veterinary physiology.

The James Gordon Bennett Prize of fifty dollars is offered for work done on local and general anesthesia. The prize is open to seniors in the Veterinary College.

The Early English Text Society Prizes. The Early English Text Society annually donates four of its publications to be awarded as prizes to the students who pass the best examination in Early English.

The Graduate Prize in Philosophy has an annual value of about twenty-five dollars, and is open for competition to all students registered in the Graduate School. The prize will be awarded to the student who submits the best paper embodying the results of research in the field of philosophy.

The George Chapman Caldwell Prize of fifty dollars was established by Professor Frank Cary Caldwell and Mrs. Grace Caldwell Chamberlain as a memorial to their father. The prize accompanied by a certificate is to be awarded annually to a member of the senior class for general excellence in chemistry.

The Stewart Prize for the production of clean milk is a prize of fifty dollars donated by Mr. S. L. Stewart of Brookside Farms, Newburgh, N. Y.

The Morrison Trophy Cup Prize is awarded to students in the winter courses for proficiency in debate.

The Charles Lee Crandall Prizes, of \$100 and \$25, were founded in 1916 by alumni of the College of Civil Engineering. The prizes are awarded annually for the best paper written by seniors or juniors in the College of Civil Engineering.

The Goethe Prize of \$50, donated by Mr. Ludwig Vogelstein of New York City, is awarded for the best essay on Goethe.

FELLOWS AND GRADUATE SCHOLARS 1918-1919

HONORARY FELLOW

Soji Nishikawa, Ph.D. (University of Tokyo)

UNIVERSITY FELLOWS

The Cornell Fellowship in English:

Mary Susan Steele, A.B. 1916.

The Sage Fellowship in Chemistry:

Louise Kelley, A.B. (Mt. Holyoke) 1916

The Schuyler Fellowship in Zoology:

Kathryn Slingerland, A.B. (Smith College) 1918

The McGraw Fellowship in Civil Engineering:

Percy Suydam Wilson, C.E. 1918

The Sibley Fellowship in Mechanical and Electrical Engineering:

Hermenegildo Balbino Reyes, M.E. 1918

The Goldwin Smith Fellowship in Geology:

Katherine Van Winkle, B.S. (University of Washington) 1918

The University Fellowship in German:

Miriam Hasbrouck Van Dyck, A.B. (Vassar) 1912; A.M. 1918

The University Fellowship in Agriculture:

Axel Ferdinand Gustafson, B.S. (University of Illinois) 1907; M.S. (same) 1912

The President White Fellowship in Modern History:

Lois Oliphant Gibbons, A.B. (University of Michigan) 1912, M.A. (University of Pennsylvania) 1914

The Susan Linn Sage Fellowships in Philosophy:

Marie Taylor Collins, A.B. (Wellesley) 1913; A.M. (Kansas) 1914

Edgar Gustave de Laski, A.B. 1917

The Susan Linn Sage Fellowship in Psychology:

Howard Scott Liddell, A.B. (Michigan) 1917

The Fellowships in Political Economy:

Hermann Hilmer, A.B. (Michigan) 1904; A.M. (Columbia) 1905; Ph.D. (Stanford) 1912

Kurt Von Schenk, A.B. (Harvard) 1913; M.S. in Agr. 1917

The Fellowships in Greek and Latin:

Marion Elizabeth Blake, A.B. (Mt. Holyoke) 1913

The Fellowship in American History:

Anne Louise Butler, A.B. (Middlebury) 1910

The Edgar J. Meyer Memorial Fellowship in Engineering Research:

Robert Martinus Dolve, B.S. in E.E. (North Dakota Agricultural College) 1905

GRADUATE SCHOLARS

The Susan Linn Sage Graduate Scholarships in Philosophy:

Marjorie Silliman Harris, B.A. (Mt. Holyoke) 1913

Israel Chasman, A.B., (University of Texas) 1916; A.M. (same) 1918

Emily Lane, B.S. (Bucknell) 1910

The Susan Linn Sage Graduate Scholarship in Psychology:

Alice Helen Sullivan, B.A. (University of Colorado) 1916; A.M. (same) 1916

The Graduate Scholarships in Mathematics:

Yun Huang Ho, A.B. 1917

Mitchell S. Lurio, A.B. 1918

George M. Robison, A.B. 1916, A.M. 1917

The Graduate Scholarship in History:

George Andrews Hedger, A.B. (University of Utah) 1906

UNIVERSITY UNDERGRADUATE SCHOLARSHIPS

THE CLASS OF 1921

- The Cornell Scholarships:**
Morris Kwit, Agriculture.
Theodore Lake Bennett, Arts and Sciences.
- The President White Scholarships:**
William Oliver Strunk, Arts and Sciences.
Lawrence Mitchell Orton, Arts and Sciences.
- The Henry B. Lord Scholarships:**
Frederick Henry Lape, Arts and Sciences (Chemistry).
Frank Harold Ellsworth, Arts and Sciences.
- The McGraw Scholarships:**
Jeno Stern, Civil Engineering.
Hyman Adelsberg, Arts and Sciences.
- The Sage Scholarships:**
Edwin Roy Shaver, Arts and Sciences (Chemistry).
Hermann Frederick Vieweg, Arts and Sciences (Chemistry).
- The Sibley Scholarships:**
Carl Fritiof Ostergren, Mechanical Engineering.
Salvatore Joseph Zammataro, Civil Engineering.
- The Stewart L. Woodford Scholarships:**
Anna Marie Vogel, Arts and Sciences.
Blanche Laura Brown, Arts and Sciences.
- The John Stanton Gould Scholarships:**
Alice Mary Hopkins, Arts and Sciences.
Louis Tinkler, Arts and Sciences.
- The Horace Greeley Scholarships:**
Earl A. Phelan, Arts and Sciences (Chemistry).
Bernard Leifer, Arts and Sciences.

THE CLASS OF 1922

- The Cornell Scholarships:**
Miriam Friedman, Arts and Sciences.
Roberta Winchell Quick, Arts and Sciences.
- The President White Scholarships:**
Robert Collyer Washburn, Arts and Sciences.
Helen Gladys Anthony, Arts and Sciences.
- The Henry B. Lord Scholarships:**
Hyman Solovay, Arts and Sciences.
Donald Hand Starks, Arts and Sciences.
- The McGraw Scholarships:**
John Paul Pritchard, Arts and Sciences.
Nancy Elizabeth Doss, Arts and Sciences.
- The Sage Scholarships:**
Evelyn Gertrude Richmond, Arts and Sciences.
Paul Eugene O'Keefe, Law.
- The Sibley Scholarships:**
Irving Clark Ralph, Mechanical Engineering.
Abram Blum, Mechanical Engineering.
- The Stewart L. Woodford Scholarships:**
Emil Robert Stasch, 3d, Arts and Sciences (Chemistry).
Edmund Francis Baxter, Arts and Sciences.
- The John Staunton Gould Scholarships:**
Dorothy Goldie Blumberg, Arts and Sciences.
Marion McMillan, Arts and Sciences.
- The Horace Greeley Scholarships:**
Robert Noah Jacobstein, Mechanical Engineering.
Charles Daniel Ludlum, Mechanical Engineering.
- The Eudorus C. Kenney Scholarships:**
Laura Reichenthal, Arts and Sciences.
Harry Garfinkel, Civil Engineering.

RESIDENTIAL HALLS

The University has five residential halls for men students. These are situated on the Campus and furnish accommodations for about four hundred and twenty men. The charges for single rooms range from \$5 to \$12 a week. For particulars address the Treasurer of the University, Ithaca, N. Y.

The residential halls for women students are Sage College and Prudence Risley Hall. In these buildings, the total cost of board, laundry, and rent of furnished rooms, with heat and light, is three hundred and fifty dollars. The University Adviser of Women has jurisdiction over all women students in the University and women students are not permitted to board or lodge outside the dormitories for women, except in houses approved by the Adviser.

SAGE CHAPEL AND BARNES HALL

Religious services, provided for by the Dean Sage Preachership Endowment, are conducted in Sage Chapel throughout the academic year by clergymen selected from the various religious denominations.

The Cornell University Christian Association is a voluntary organization of students and professors formed for their own religious culture and for the promotion of Christian living in the University. The Christian Association has its home in Barnes Hall, which contains a library of biblical literature and reading and recreation rooms. Bible study courses are carried on throughout the year.

THE CORNELL INFIRMARY

The Cornell Infirmary is the former mansion of the late Henry Williams Sage, for many years chairman of the Board of Trustees of the University. At his death in 1897, his sons, Dean and William Henry Sage, endowed it and gave it to the University for a students' Infirmary as a memorial to their father. In 1912 the annex to the Infirmary was erected with a capacity of sixty-two beds.

The Infirmary is in charge of a superintendent and is open throughout the University year. It provides suitable rooms, food, and nursing, for sick students. It has no medical staff; students select their own physicians among practitioners in Ithaca or elsewhere. For Infirmary fees see page 45.

PHYSICAL EXAMINATIONS AND MEDICAL ADVICE

Medical Advisers and Examiners: Samuel Archer Munford, M.D., (Absent on leave); Edith H. Matzke, M.D., (Absent on leave); Edith H. Gordon, M.D.; Frank C. Balderrey, (Absent on leave); J. R. Harris, M.D.; Richard Kimpton, M.D.; A. H. Haight, M.D.; A. H. Sharpe, M.D.

A physical examination is required of all students upon entering the University. The Medical Advisers observe regular office hours at their respective offices in the gymnasium for men and Sage College.

All students are at liberty and are urged, in cases of sickness or indisposition, to consult the Medical Advisers for a diagnosis of their ailments, to the end that they may be informed whether the further attention of a physician is necessary. When students are confined to their rooms, their house stewards or landlords are urged to communicate speedily with the Medical Advisers.

No charge is made for physical examinations or medical advice.

MILITARY SCIENCE AND TACTICS

Every male student, a candidate for a baccalaureate degree, except in the College of Law, who is required to take five, six, seven, eight or more terms in residence, must take, in addition to the scholastic requirements for the degree, one, two, three, or four terms respectively, of three hours a week, in the Department of Military Science and Tactics.

The requirements in Military Science must be completed in the first terms of residence; otherwise the student will not be permitted to register again in the University, without the consent of the University Faculty.

The aim of the Department is to give training which will enable the graduates to serve as officers of a reserve or volunteer force. The students are organized into companies and a band for a course of training prescribed by the War Department.

This course includes physical training, military drill, and the application of fundamental principles of modern infantry tactics. During the second year qualified men may be given optional instruction in units specializing in signal corps, military engineering, and machine gun training. The band is both the cadet and university band. Students regularly enrolled in the Department may be assigned thereto for training, instead of to a company.

Any properly qualified member of the Cornell University Reserve Officers Training Corps who has satisfactorily passed the first year of his university course, may, on the recommendation of the Commandant, and the nomination of the President of the University, be commissioned as an officer by the University Faculty. The University provides pay, ranging from \$50 to \$250 annually, for each of the fifty-one commissioned officers of the Reserve Officers Training Corps. In addition, the nineteen senior officers are assistants in the Department.

Any student may elect drill during his entire course at the University.

Each cadet is required to have a uniform consisting of olive drab service coat, cap, breeches, woolen shirt, leggings, black tie, and web waist belt, made according to the specifications of the United States Army. These are at present furnished only by one contractor, maintaining an agent in Ithaca, at a cost approved by the University. High tan shoes must be provided in addition, and the army last is required.

DEPARTMENT OF PHYSICAL CULTURE

Students who are officially relieved of the requirements of Military Science and Tactics are subject to the requirements of the Department of Physical Culture.

Every male student who is a candidate for a baccalaureate degree in the four-year course is required to take two years of Physical Culture in case he is relieved of the requirements of the Department of Military Training.

Every woman student who is a candidate for a baccalaureate degree in a four-year course, must take throughout the first two years of her course, two and a half actual hours a week in the Department of Physical Culture.

The requirements in regard to Physical Training must be completed by the end of the Sophomore year (i. e., two years before graduation); otherwise the student will not be permitted to register again in the University, without the consent of the University Faculty.

It is the desire of the University that physical exercise should prove interesting and attractive to all students, not merely to those of unusual physical ability who are attempting to become members of some of the organized athletic teams.

ATHLETICS

An athletic league exists among the various colleges of the University and a series of athletic contests is carried on throughout the year; all students in the University except the varsity athletes may participate in these. The games consist of cross-country running, association football, basketball, indoor athletics, baseball, track athletics, and rowing.

The playground and Schoellkopf athletic field cover fifty-five acres. They are within five minutes walk of the Quadrangle and are used as a general playground for baseball, soccer, lacrosse, tennis, etc.

The Armory and the Gymnasium are used for indoor athletic work during the winter months. The Intercollege boat house, situated on the Inlet, is used in the spring by the Intercollege crews. Women students have their separate gymnasium, boat house, athletic field, etc.

All students who desire to train for athletic competitions are required to be examined by one of the medical examiners.

The University Faculty through its Committee on Student Affairs exercises jurisdiction over organized athletic teams and other recognized student organizations in respect of eligibility rules and leaves of absence.

ATHLETIC ASSOCIATION

The Cornell Athletic Association is an independent organization incorporated under the laws of the State of New York. Its board of trustees is composed of one representative from the Board of Trustees of Cornell University, and four from the faculties of the University, with one member at large, who together with representatives of the alumni and eight students representing officially the different branches of athletics, besides the representation of the undergraduate wearers of the "C," the representatives of the Minor Athletic Sports Association, and freshman representative constitute the Athletic Council. The Association owns Percy Field, the boats and boat houses, two gasoline launches, and other athletic equipment. The Association issues an annual membership ticket on the payment of \$10. The holders of these membership tickets are entitled to admission to every local athletic contest under the management of the Association, including all games of baseball, football, and track. Members are also entitled to first choice of reserved seats, and no reserved seat tickets for games or boat races are sold until the members of the Association have been supplied with the seats they require. No further subscription toward the support of athletics is solicited from holders of membership tickets. The Athletic Council is charged with the active management of the athletic interests of the University. The graduate manager is custodian of the funds belonging to the Association and to the various branches.

The Athletic Association has under its jurisdiction the part of Alumni Field set aside for varsity athletics consisting of about twelve acres. That part of Alumni Field which is devoted to varsity track athletics and football, is known as "Schoellkopf Field" and was equipped by members of the Schoellkopf family as a memorial to Jacob F. Schoellkopf; it contains a quarter-mile track, football gridiron and stadium, seating 9000 people, above which are two levels in which automobiles are parked.

Schoellkopf Memorial Building on Schoellkopf Field was erected by an alumnus of the University as a memorial to his friend, Henry Schoellkopf, A.B., '02. In this building are the dressing rooms for the varsity athletic teams and the offices of the Cornell University Athletic Association. Bacon Practice Hall, also adjacent to Schoellkopf Field, contains a dirt floor and is used for baseball, track, football, soccer and lacrosse practices.

Percy Field, an athletic field, covering ten acres, is used for baseball only. It is hoped that funds may be raised in the near future to finish the part of Alumni Field adjacent to Schoellkopf Field, which has been set aside for the baseball diamond, and stands to seat 6500 people.

The athletic Association also has a boat house, shells, gigs, launches, etc., to use in the training of the varsity crews, situated on the Inlet about one-half mile from Cayuga Lake.

Officers

Herman Diederichs	President
Charles Hazen Blood	Financial Adviser

Members

Charles Hazen Blood	Board of Trustees
Charles Edward Treman	At large
David Fletcher Hoy	Faculty
Eugene Plumb Andrews	Faculty
Willard Winfield Rowlee	Faculty
Lt. Col. Frank A. Barton	Faculty
Sherman Trowbridge	"C" Representative
Morse G. Dial	Navy Manager
.....	Crew Representative
Ross G. Bennett	Baseball Manager
Louis A. Corwin	Baseball Captain
Halstead Miller Maccabe	Football Manager

.....	Football Captain
Leon G. Clay.....	Track Manager
Horace Ellsworth Shackleton.....	Track Captain
Charles Wellington Elmer.....	Minor "Sports" Representative
Alger Eugene Hunkin.....	Freshman Representative

BENEFICIARY AND LOAN FUNDS

The following beneficiary and loan funds have been established, the income of which is available for the aid of deserving students in Cornell University. The amounts indicated are the totals of the respective funds on July 1, 1918.

Guiteau Student Loan Fund. Gifts under the wills of Frederick W. Guiteau and of Mrs. Nancy G. Howe (\$94,689.03), the income to be used in advancing and assisting needful, worthy young men in pursuing their studies in the University. Established 1904..... \$330,150.10

Agricultural Students Loan Fund. Founded by gift of the School of Practical Agriculture and Horticulture at Briarcliff, N. Y., to aid students in the Agricultural College who are working their way through, and increased by Agricultural students. Established 1908..... \$873.01

Florence Dearstyne Fund. Gift under the will of Miss Florence E. Dearstyne, the income to be used under the direction of the Federation of Cornell Women's Clubs in assisting needy young women students. Established 1914... \$2,367.71

Polish Students Loan Fund. Gift from Polish students at Cornell to be disbursed to candidates presented by members of the Polish Club of the University. Established 1909..... \$128.00

William C. Seidel Book Fund. Gift of Mr. and Mrs. Gerrit S. Miller, the income to be used to purchase books for poor young men working their way through the College of Civil Engineering. Established 1905..... \$1,165.16

State Scholarship Alumni Fund. The nucleus of a fund to assist needy students. Established in 1914 by the gift of G. W. Graves, A.B., 1905, M.D., 1908, of the equivalent of the state scholarship held by him..... \$401.00

Woman's Guild Fund. The gift of women interested in the University, the income to be used to aid needy sick students. Established 1892..... \$6,557.41

Women Students Loan Fund. Consists of former Students Loan Fund, the income to be loaned to needy women students, and increased in 1913 by \$7,000, temporarily assigned to the fund by the late President Andrew D. White from funds placed at his disposal by Trustee Andrew Carnegie \$25,562.95

Wurts Loan Fund. Gift of \$2,000 by Alexander Jay Wurts, in memory of his mother, the income to be loaned to students of Sibley College to "help lift the man's burden from the boy's shoulders." Additions by Sibley students. Established 1912..... \$2,267.74

Edwin G. Vail Fund. Gift under the will of Edwin G. Vail of Dutchess County, the income to be expended in the aid of needy students from Dutchess County who may in the annual examination therefor succeed in winning a State Tuition Scholarship in the University..... \$10,000.00

PUBLICATIONS

Cornell University. Official publication. v. I-10. 1910-1919.

Issued monthly from July through November, and semi-monthly from December through June. It includes the annual Register, the Annual Report of the President, the announcements of the various colleges, the General Circular of Information, and various departmental and other announcements. The Secretary of the University is the University Publisher.

Philosophical review. v. I-16. 1892-1918.

A bimonthly journal edited by James E. Creighton, Professor of Logic and Metaphysics in the Sage School of Philosophy.

Cornell studies in classical philology. v. I-20. 1887-1917.

This series is edited by Charles E. Bennett, Goldwin Smith Professor of Latin and George P. Bristol, Professor of Greek.

Journal of physical chemistry. v. 1-22. 1896-1918.

Published monthly during the academic year by Wilder D. Bancroft, Professor of Physical Chemistry.

Cornell studies in philosophy. v. 1-11. 1900-1919.

This series of monographs is issued under the editorial supervision of the professors of philosophy in the Sage School of Philosophy.

Islandica. v. 1-11. 1908-1918.

An annual relating to Iceland and to the Fiske Icelandic collection in the Cornell University Library.

Cornell University medical bulletin. v. 1-7. 1911-1918.

Cornell University. Medical College. Publications. 1901-1917.

The Bulletin and Publications contain studies from the various departments of the Medical College.

Cornell University. Agricultural Experiment Station. Memoirs. No. 1-18. 1913-1918.

The Memoirs consist of the more technical bulletins of the Federal Experiment Station at Cornell University.

Cornell studies in English. No. 1-3. 1916-1917.

This series is edited by Professors Joseph Q. Adams, jr., Clark S. Northup, and Martin W. Sampson.

Cornell University. Library.

Catalog of the historical library of Andrew Dickson White. Parts 1-2.

Catalog of the Dante collection presented by Willard Fiske.

Catalog of the Petrarch collection bequeathed by Willard Fiske.

Catalog of the Icelandic collection bequeathed by Willard Fiske.

Catalog of Runic literature, forming a part of the Icelandic collection bequeathed by Willard Fiske.

CORNELL'S WORK DURING THE WAR

From the beginning of the war it was the aim of the Trustees and Faculty of Cornell University to give every possible help to the Government. Special courses of military study were introduced, research was conducted in departments of science that were contributory to the prosecution of the war, and members of the Faculty served as expert advisers of Government bureaus. In 1917-1918 ninety-eight members of the instructing staff of the University were in government service. Many others had resigned from the staff to accept government appointments.

On September 1, 1918, there were more than 5,200 Cornell men in the military and naval service of this country and its allies. The approximate number of those men who were in the United States Army was 3,720; of those in the United States Navy, 1,100. About 400 others were in civilian occupations directly related to the military establishment. More than half of the Cornell men in the uniformed services were commissioned officers; in the Army alone the proportion of officers was about fifty-five per cent.

The University as a body organized, in direct co-operation with the War Department, several schools for the training of soldiers. The earliest of these schools established here was a U. S. Army School of Military Aeronautics. It was opened in May, 1917, with a civilian staff of teachers drawn from the Faculty, and it was operated without interruption until hostilities ceased. The course of training, which at first covered eight weeks, was soon extended to occupy twelve weeks. The school had the use of the New York State Drill Hall, of a mess hall and other temporary buildings provided by the University, and of the Bacon Practice Hall. It was characterized by officers of the Air Service as being among the best of the several ground schools of aeronautics maintained by that service at American universities. Many hundreds of young men went through this school, completed the course of instruction in flying at Army aviation fields, received commissions, and were assigned to active service overseas.

Soon after the school of aeronautics was opened, a school of aerial photography was added as an auxiliary. This school also was successful.

The development of America's military organization revealed to the Government new ways in which universities could serve its needs. The War Department created a Committee on Education and Special Training to enlist the aid of educational institutions. Cornell's next opportunity to serve the nation in a large way offered itself when that committee devised a scheme to use the personal and physical equipment of technical schools in the training of mechanics for the Army. Cornell seized the opportunity. Immediately after the conclusion of the University's regular session of 1917-1918, a contingent of 320 soldiers was sent here to be trained for service as auto-mechanics, machinists, blacksmiths, tinsmiths, carpenters, bench woodworkers, electricians, or horseshoers. The term of instruction was eight weeks. Cascadilla Hall was used for the housing and mess of these soldiers, under a contract by which the Government reimbursed the University for the cost. This school was operated until after hostilities ceased.

The Committee on Education and Special Training next extended its field to include instruction of collegiate grade in order to train officer material for the

Army. Cornell at once began to adjust its organization and equipment to meet the new opportunity. The Trustees' Committee on General Administration authorized the establishment here of a collegiate unit of 2,000 men of the proposed training corps.

At that time, midsummer of 1918, the scheme of the Students' Army Training Corps contemplated no change in the status of students under the age of twenty-one years. Such students were to be encouraged to remain in college and pursue their regular courses of study while receiving also intensive training designed to fit them for admission to officers' training camps soon after they attained the age of twenty-one. But when, in August, the Administration introduced in Congress its so-called Man Power Bill, including men of eighteen, nineteen, and twenty years in the selective draft, the Committee on Education made a radical change in its plan of training—a change that much increased the degree to which colleges were to be militarized. Under the amended plan, students inducted into the training corps were to become immediately soldiers in the Army; they were to be under military discipline, were to be housed in barracks, subsisted, and instructed at the Government's expense, and were to pursue a course of study prescribed by military authority with reference to the Army's immediate needs. The University found that most of its male students might count on a residence, not of one, two, or three years, but of three, six, or nine months in college. Their places, when they were called away, were to be filled by other young men to be selected, not by the University with its usual entrance tests, but by army examining boards with army rating methods. The Committee on Education prescribed for the work of members of the training corps both a new calendar, based upon a quarterly division of the year, and a new daily programme. The outlines of the new plan were made known to the University early in September; the training corps was to be organized as soon as possible after the first of October; only a few weeks were afforded for the complex task of reorganizing the staff, fitting the equipment, and adapting the machinery of instruction to the emergency.

The problem of housing and mess for the student soldiers had been referred by the Committee on General Administration to a special committee consisting of the Acting President, the Treasurer, the Superintendent of Buildings and Grounds, and the Professor of Military Science and Tactics. Meanwhile arrangements had been made for the training here of 450 radio-engineers, but the opening of this school was prevented by the influenza epidemic.

The men of the vocational section were housed in the new residential halls (Founders Hall and the three buildings of Baker Court). For their use a new wooden mess hall was built near the residential halls. The cafeterias in Cascadilla Hall and the Home Economics building were used as mess halls by the men of the collegiate section of the Students' Army Training Corps. The men of that section were quartered in fraternity houses.

This use of fraternity houses was a happy means of solving a problem that might have been difficult. The University had undertaken to instruct 2,000 of the collegiate section. One of the requirements of the Committee on Education was that these men should be housed in units large enough for military discipline. Cornell was fortunate in having this great group of fraternity houses—buildings affording vastly better quarters for the winter than the temporary barracks

that must be constructed at some other universities. Any fraternity was, of course, free to determine whether its house should be put at the University's disposition for military use; but practically every chapter made a voluntary offer of its house and made little or no mention of the question of recompense. The University committee selected about forty of the houses. The men were lodged there in groups of twenty-five, fifty, or seventy-five. The University executed a lease of simple form with each of the owners. It operated all the houses so leased, drawing upon the allowance that the Government makes for the housing of the student soldiers, and paying *pro rata* to the fraternities what remained of the allowance after the expenses of operation were discharged.

To adapt the University's teaching to the new order of things was far more perplexing than to make the merely physical changes that were required. The Committee on Education at Washington defined certain curricula for members of the Students' Army Training Corps. Much of the content of these curricula was prescribed by the committee. The student's course was laid out with reference to that branch of the service which he elected to prepare for. The men of the corps were assorted in five groups and for each group there was a distinct programme of study. The groups were (I) infantry and artillery, (II) air service, (III) ordnance corps and quartermaster corps, (IV) engineer corps, signal corps, and chemical warfare service, and (V) transport service and tank service. For Group IV the colleges of engineering and the department of chemistry arranged special programmes which the Committee on Education approved; those programmes were to occupy two years, or eight terms of twelve weeks each. The programmes of men of other groups were made up of certain "essential subjects." Two requirements common to all programmes were military instruction and instruction on the causes and issues of the war. Other subjects "essential" to one group or another were military law and practice, hygiene and sanitation, surveying and map making, map reading and navigation, elementary physics, modern ordnance, business management, and trigonometry. The "allied subjects" from among which the student might fill out his schedule included modern languages, history, international law, and most of the main branches into which the study of science commonly is divided.

Adding to this complexity of study courses was the establishment here by the Navy of a training unit of 310 men and by the Marine Corps of a section of thirty-six men. In the Students' Army Training Corps, furthermore, students were classified not as seniors, juniors, sophomores, and freshmen, but as men of twenty years or more, who might count on about three months at college; men of nineteen years, who might count on about six months at college, and men of eighteen, for whom a college course of nine months, or three terms of twelve weeks each, might be laid out.

A conference of the members of the teaching staff, called by the Acting President, was held on September 16, 1918. There were 144 present. They unanimously expressed the opinion that, so long as the Students' Army Training Corps be maintained here, the University should adjust all its work to the quarterly division of the calendar year, and they instructed the Acting President to appoint a committee, with power, on the relations of Cornell University to the Students' Army Training Corps. Such a committee, representative of the several

colleges and major departments, was appointed. Under its direction a smaller committee accomplished, in a few days of unremitting labor, the difficult task of laying out the so-called "war courses," dividing the classes into sections, assigning hours and rooms to the several sections, etc.

STUDENTS' ARMY TRAINING CORPS

COLLEGIATE SECTION

GENERAL STATEMENT

Induction into the Students' Army Training Corps at Cornell University is a privilege accorded to men who registered September 12, 1918 under the Selective Service Law as amended August 31, 1918. For these persons induction into the S. A. T. C. is voluntary and follows only upon their registration in the University and their personal application to the Commandant, Lieut. Col. Frank A. Barton, at the Old Armory.

Men who, prior to September 12, 1918, registered for the draft are eligible for membership in the Cornell Unit of the S. A. T. C. only if they are in deferred classification, or in class one qualified for limited service only, and the induction of such men can be made, after consultation with Colonel Barton, only by authority of competent order directed to the proper local draft board.

After induction, a member of the S. A. T. C. must pursue some one of the programs of studies prescribed by the Committee on Education and Special Training of the General Staff, as herein set forth. Concerning the measure in which successful completion of a term's work in any such program will advance him towards his academic degree, no assurance can at present be given. Determination of that question must await the action of the Faculties charged with responsibility for the several degrees.

Meanwhile "the student soldiers will be kept under observation and test to determine their qualification as officer-candidates, and technical experts. After a certain period, the men will be selected according to their performance, and assigned to military duty in one of the following ways:

- (a) He may be assigned to a central officers' training camp.
- (b) He may be transferred to a non-commissioned officers' training-school.
- (c) He may be assigned to the school where he is enrolled for further intensive work in a specified line for a limited specified time.
- (d) He may be assigned to the vocational training section of the Corps for technical training of military value.
- (e) He may be transferred to a cantonment for duty with troops as a private.

Similar sorting and re-assignment of the men will be made at periodical intervals as the requirements of the service demand. It cannot now be definitely stated how long a particular student will remain at college. This will depend on the requirements of the mobilization and the age group to which he belongs. Students will ordinarily not be permitted to remain on duty in the college units after the majority of their fellow citizens of like age have been called to military service at camp."—*War Department Statement, 28 August, 1918.*

It is, therefore, impossible to give any assurance either that a member of the S. A. T. C. will be allowed to remain at the University until a specified date, or

that he may not be permitted to remain beyond it. Nevertheless many of the programs of studies appear to be planned by the Department primarily with a view to the length of time that members of the S. A. T. C. may normally expect to remain. Thus men who had reached the age of twenty years on or before September 12, 1918, since "they may have but a single term of twelve weeks in college," are required to devote practically their entire time to "essential subjects" in their first term. Men of nineteen, who "may have but two terms of twelve weeks in college," must complete the same subjects by the end of their second term; men of eighteen, by the end of their third term.

In this pamphlet, for the convenience of such members of the S. A. T. C. as may, for any reason, perhaps be permitted to remain longer, the several programs are here filled out, in part, for at least three terms. No inference, however, may justly be drawn from this to the effect that any particular member of the S. A. T. C. will be permitted to complete his program as here printed. He is a soldier under orders and liable to be assigned at any time to some other line of duty.

It has been found that the men of good general education make the better officers. The announced intention of the War Department is to take into consideration the nature of the performance of the S. A. T. C. student-soldiers in determining their assignment to further military duties (a, b, c, d, e, above). Other things being equal, the better students will secure the more desirable assignments. It is therefore obvious that, quite irrespective of candidacy for an academic degree, every student must find the incentives which customarily move him to desire success in his studies very appreciably intensified by his membership in the Students' Army Training Corps Unit at Cornell University.

SUBJECTS OF STUDY

Certain "Essential Subjects" of study have been prescribed by the Committee on Education and Special Training of the War Department for members of the S. A. T. C. either directly or through the approval of D programs requiring them. Only the Essential Subjects are enumerated in the following programs. The first academic care of every member should be to note the Essential Subjects of his program and to learn where, and at what days and hours, his classes in them will come. He is then ready to fill his unassigned hours, as far as the allowable total of fourteen class hours besides Military Instruction may permit, with classes in the Allied Subjects which the Committee has also designated, viz.: English, French, German, Mathematics, Physics, Chemistry, Biology, Geology, Psychology, Geography, Topography and Map Making, Meteorology, Astronomy, Hygiene, Sanitation, Descriptive Geometry, Mechanical and Freehand Drawing, Surveying, Economics, Accounting, History, International Law, Government. Permission may also be granted for the recognition of further Allied Subjects, with the limitation that no student may pursue more than one such class, and that for not more than three hours a week in lectures and recitations, with corresponding time for study.

Many courses in Allied Subjects are offered in the various colleges of Cornell University. These, as far as called for by, or appropriate to, any program of study for the S. A. T. C., are open to every member who is personally qualified (has the "prerequisites") to pursue them, regardless of the college in which he is registered. In consequence, however, of the many changes made throughout

the University, especially because of the S. A. T. C. itself, since the announcements of the several colleges were printed last spring, it is probable that some courses can not now be given precisely as then promised, and that some must even be altogether omitted. A student desiring to pursue any course in an Allied Subject should therefore consult, as promptly as possible, the teacher of it, or the head of the Department in which it is offered, in order to learn what alterations in the course may have been found necessary, or have been planned with particular reference to the needs of the Students' Army Training Corps.

ESSENTIAL SUBJECTS

No one except members of the Students' Army Training Corps will be admitted to the following courses: War Issues, Military Law, Hygiene and Sanitation, Surveying and Map Making, Map Reading and Navigation, the one-hour class in Trigonometry, Modern Ordnance.

War 1. Military Instruction. All Programs. Eleven actual hours a week. Details regarding this subject will be promulgated from time to time by the Commandant. Office, Old Armory.

War 2. War Issues. All Programs. One lecture and two class meetings each week. Office, Goldwin Smith Hall, room 159.

At the first meeting at 11 A. M. on Thursday, October 10, all members of the course will be addressed by President Schurman in Bailey Hall. Thereafter members of the course will separate, as their assignment cards direct, into four groups for lecture on Monday, and into sections for class work on one of the four following days as follows:

- | | | |
|-------------------------------|---------------------|-----------------------------|
| I. Lectures, Bailey Hall, & | Sections I a T., | Goldwin Smith Hall, room C. |
| | Sections I b W., | " " " " C. |
| | Sections I c Th., | " " " " C. |
| | Sections I d F., | " " " " C. |
| II. Lectures, Roberts Hall, & | Sections II a T., | Boardman Hall, room C. |
| | Sections II b W., | " " " " C. |
| | Sections II c Th., | " " " " C. |
| | Sections II d F., | " " " " C. |
| III. Lectures, Barnes Hall, & | Sections III a T., | Goldwin Smith Hall, room A. |
| | Sections III b W., | " " " " A. |
| | Sections III c Th., | " " " " A. |
| | Sections III d F., | " " " " A. |
| IV. Lectures, Sibley Dome, & | Sections IV a T., | Goldwin Smith Hall B. |
| | Sections IV b W., | " " " " B. |
| | Sections IV c Th., | " " " " B. |
| | Sections IV d F., | " " " " B. |

The third weekly session of this class will be on Saturday at 8 or 9. Students in making out their schedules must leave one of these hours free for the War Issues course.*

Arrangements for rooms in Military Law, Hygiene and Sanitation (except the lectures), Surveying and Map Making, Map Reading and Navigation, Modern Ordnance, and Trigonometry, and for laboratory periods in Elementary Physics, and Map Reading and Navigation, will be made at the offices mentioned below.

*Note. The following may be excused from this course: (1) Members of the S. A. T. C. who have had a similar course even though not identical in every detail; (2) Members of the S. A. T. C. who have already had at least two years of work of collegiate grade in an approved institution and who should be required to concentrate the whole of their time on advanced studies, i.e. those in Program D. Application for excuse should be made in Goldwin Smith Hall, room 159.

War 3. Military Law and Practice. Programs A, B, C, and E. Three class meetings each week. Office, Boardman Hall, Room 9, daily 10-12 and 2-4.

Sections a W., Th., Fr., at 11.	Sections c T., W., Fri., at 11.
Sections b T., Th., Fr., at 11.	Sections d T., W., Th., at 11.

as assignment card directs.

War 4. Hygiene and Sanitation. Program A. One lecture and two class meetings each week. Office Veterinary Museum.

Lectures I. Monday at 10.	Stimson Amphitheatre.
Lectures II. Tuesday at 10.	Stimson Amphitheatre.
Lectures III. Wednesday at 10.	Stimson Amphitheatre.
Sections 1. W., Fri., at 8:00	Sections 5. T., Th., at 1:30.
Sections 2. Th., Sat., at 8:00	Sections 6. T., Th., at 2:30
Sections 3. W., Fri., at 9:00	Sections 7. W., Fri., at 10:00
Sections 4. Th., Sat., at 9:00	

as assignment card directs.

War 5. Surveying and Map Making. Program A. Three lectures and one three-hour period for field work each week. Office, Lincoln Hall, Room 12.

Lecture I., M., W., Fri., 1:30	Lecture II, M., W., Fri., 2:30
Field Periods 1, M., 8-11	Field Periods 4, Th., 8-11
2, Tu., 8-11	5, Fri., 8-11
3, W., 8-11.	

as assignment card directs.

War 6. Map Reading and Navigation. Program B. Three lectures and one laboratory period each week. Office, Lincoln Hall, Room 12.

Lecture M., W., Fri., 2:30. Laboratory 1, M, 8-11. 2, W., 8-11. 3, Fri., 8-11.

War 7. Elementary Physics. Programs B and D and subprogram Co. Three lectures and one two-hour laboratory each week, Office, Rockefeller Hall. Room 121.

Lecture T., Th., at 10:00 and S. at 9:00. Laboratory 1, T, 8-10. 2, W., 8-10. 3, Th., 8-10. 4, Fri., 8-10.

War 8. Modern Ordnance. Subprogram Co. One class meeting each week. Office, Old Armory. Section 1, M., 10. 2, W., 10. 3, Fri., 10.

War 9. Business Management. Program Co. Two lectures each week. Office, West Sibley, Room 17, 9-12, 2-4. Lectures, T, Th., 2:30.

War 10. Trigonometry. Program A, for men twenty years of age only. One class meeting each week. Office, White Hall, Room 29. Section 1, M., 10. 2, T., 10. 3, W., 10. 4, Th., 10. 5, Fri., 10.

THE PROGRAMS

Every member inducted into the S. A. T. C. must enter some one of the following groups or one of the courses enumerated, on p. 183, and pursue a program of studies therein which is primarily determined, except as elsewhere otherwise stated, by his age on September 12, 1918. The groups are distinguished from one another by the branch of service to which the programs of study assigned them are intended to afford preparation, viz.:

Group I. Infantry, Field Artillery, Heavy (Coast) Artillery. The program of study assigned this group is designated by the War Department as "Program A."

Group II. Air Service, "Program B."

Group III. Ordnance Corps and Quartermaster Corps, "Program C."

Group IV. Engineer Corps, Signal Corps, Chemical Warfare Service, "Program D."

Group V. Transport Service and Tank Service, "Program E."

The programs of the S. A. T. C. require in general that fifty-three hours each week be devoted to instruction and study. Each hour of academic lectures or recitations assumes two hours of supervised study in preparation, thus making a total of forty-two hours a week assigned to academic work in the following programs and eleven hours to military instruction.

Concerning the choice of programs the Committee on Education says, September 28, 1918:

"In assigning the soldiers of the Students' Army Training Corps to various branches of the Service the guiding principle will be to place each man where he can render his maximum service consistent with the needs of the Army at the time of his transfer. Generally speaking a soldier is likely to give the best account of himself in the line in which he is most interested. Therefore, the preference of registrants who are voluntarily inducted into the Students' Army Training Corps as to the branch of the Service they ultimately enter will be given consideration except in case military needs require a different course.

The student soldier is at liberty to select the program of studies (in line with the communication of this Committee dated September 18 on "Curricula") which is suggested as preparation for the particular branch of the Service he desires to enter. This choice of a program of studies does not, however, constitute the determination of the branch of the Service to which he may be transferred. The direction of his transfer will be determined by the fitness of the soldier for service and the needs of the Army at the time of his transfer.

The proportion of calls upon the Students' Army Training Corps for Officer candidates during the next nine months is expected to be about as follows:

To Infantry (including Machine Gun Battalions), Field Artillery and Heavy (Coast) Artillery sixty per cent, of which percentage approximately two-thirds will require special preparation in mathematics as outlined in letter of Sept. 18.

To Air Service,—twenty per cent.

To Ordnance and Quartermaster Corps,—ten per cent.

To remaining Corps including Engineers, Signal Corps, Chemical Warfare Service, etc., ten per cent.* These Corps require more special technical qualifications.

The Quartermaster and Ordnance Corps will require a considerable number of limited service officers.

Information is being prepared and will soon be issued for each student soldier which will give a definite statement of the type of men and the kind of preparation required by the several branches of the Service as well as a brief statement of the character of duties of Officers of each branch.

*Members of the S. A. T. C. Unit at Cornell may well consider that the Committee on Education is here addressing each of the five hundred or more institutions having S. A. T. C. units. Inasmuch as many of them may be relatively less prepared than Cornell University is to develop the "more special technical qualifications" required, it appears reasonable that the proportion following D programs here should exceed ten per cent.

It is good general advice to all student soldiers who have been pursuing or had planned to pursue some technical course to continue along that technical line or in preparation for it.

A plan is being formulated for rating each student soldier with regard to several distinct qualities, i. e., intelligence (academic work), ability to command men, physique, business ability, character, honor or scrupulousness, and other qualities.

The varied characteristics of the different individuals thus indicated together with individual expressions of choice will enable intelligent transfer.

While it is expected that a substantial number of soldiers of the Students' Army Training Corps will develop sufficiently to warrant their transfer to the Officers Training Schools for Infantry and the various Corps, and there be given a chance to demonstrate their ability as prospective officers, it must be understood that the selection will be on a highly competitive basis and that many will necessarily be transferred without special recommendation in this regard. Such men will have their further opportunity to qualify for commission in the course of active service."

PROGRAM A. INFANTRY AND ARTILLERY. GROUP I
For Men 20 Years Old on September 12, 1918.

SUBJECTS	Terms:	1st	2nd	3rd
Military Instruction.....		11	11	11
War Issues.....		9	9	9
Military Law and Practice.....		9		
Hygiene and Sanitation.....		9		
Surveying and Map Making.....		12		
*Trigonometry.....		3		
Contingent upon remaining beyond one term....			33	33
		—	—	—
Total.....		53	53	53

For Men 19 Years Old.

Military Instruction.....	11	11	11
War Issues.....	9	9	9
Military Law and Practice.....	9		
Hygiene and Sanitation.....		9	
Surveying and Map Making.....		12	
*Trigonometry.....	9		
†Unassigned.....	15	12	
Contingent upon remaining beyond two terms....			33
	—	—	—
Total.....	53	53	53

For Men 18 Years Old.

Military Instruction.....	11	11	11
War Issues.....	9	9	9
Military Law and Practice.....		9	
Hygiene and Sanitation.....			9
Surveying and Map Making.....			12
*Trigonometry.....		9	
†Unassigned.....	33	15	12
	—	—	—
Total.....	53	53	53

*If a student has credit for plane trigonometry, either as an entrance subject or in the University, he is relieved of that requirement in program A. Twenty-year-old men are required to devote the hours thus released to the study of English composition in connection with the War Issues course.

†Students following program A as a preparation for service in the artillery should elect Mathematics, especially analytical geometry and probability.

PROGRAM B.

AIR SERVICE.

GROUP II

For Men 20 Years Old on September 12, 1918.

SUBJECTS	Terms:	1st	2nd	3rd
Military Instruction.....		11	11	11
War Issues.....		9	9	9
Military Law and Practice.....		9		
Map Reading and Navigation.....		12		
*Elementary Physics.....		12		
Contingent upon remaining beyond one term.....		—	33	33
Total.....		53	53	53

For Men 19 Years Old.

SUBJECTS				
Military Instruction.....	11	11	11	
War Issues.....	9	9	9	
Military Law and Practice.....	9			
Map Reading and Navigation.....		12		
*Elementary Physics.....		12		
Unassigned.....	24	9		
Contingent upon remaining beyond two terms.....	—	—		33
Total.....	53	53	53	53

For Men 18 Years Old.

Military Instruction.....	11	11	11
War Issues.....	9	9	9
Military Law and Practice.....		9	
Map Reading and Navigation.....			12
*Elementary Physics.....			12
Unassigned.....	33	24	9
Total.....	53	53	53

PROGRAM C

GROUP III

ORDNANCE CORPS AND QUARTERMASTER CORPS

This program is appropriate for limited service men as well as for full service men.

The programs for Ordnance and Quartermaster Corps differ in some details and are here set out separately as subprograms Co and Cq.

SUB-PROGRAM Co., ORDNANCE CORPS

For Men 20 Years Old on September 12, 1918

SUBJECTS	Terms:	1st	2nd	3rd
Military Instruction.....		11	11	11
War Issues.....		9	9	9
Military Law and Practice.....		9		
*Elementary Physics.....		12		
Modern Ordnance.....		3		
Business Management (see footnote next page).....		6		
Unassigned.....		3		
Contingent upon remaining beyond one term.....		—	33	33
Total.....		53	53	53

*Members who in the University have passed course 2 or 3 in the Department of Physics are relieved of this requirement of Elementary Physics and may devote 12 hours to Allied Subjects instead.

For Men 19 Years Old

SUBJECTS	Terms:	1st	2nd	3rd
Military Instruction.....		11	11	11
War Issues.....		9	9	9
Military Law and Practice.....			9	
*Elementary Physics.....			12	
Modern Ordnance.....			3	
*Business Management.....	6			
Unassigned.....	27		9	
Contingent upon remaining beyond two terms.....				33
Total.....		53	53	53

For Men 18 Years Old

SUBJECTS	Terms:	1st	2nd	3rd
Military Instruction.....		11	11	11
War Issues.....		9	9	9
Military Law and Practice.....				9
*Elementary Physics.....				12
Modern Ordnance.....			3	
Business Management.....			6	
Unassigned.....	33		24	12
Total.....		53	53	53

Full service men who require a greater amount of scientific preparation for the Ordnance Corps than is specified by subprogram Co should select, under advice from the Military Department, appropriate subjects of study in the engineering colleges.

SUBPROGRAM Co., QUARTERMASTER CORPS**For Men 20 Years Old on September 12, 1918**

SUBJECTS	Terms:	1st	2nd	3rd
Military Instruction.....		11	11	11
War Issues.....		9	9	9
Military Law and Practice.....		9		
Unassigned.....	24			
Contingent upon remaining beyond one term.....			33	33
Total.....		53	53	53

For Men 19 Years Old

Military Instruction.....	11	11	11
War Issues.....	9	9	9
Military Law and Practice.....		9	
Unassigned.....	33	24	
Contingent upon remaining beyond two terms.....			33
Total.....	53	53	53

For Men 18 Years Old.

Military Instruction.....	11	11	11
War Issues.....	9	9	9
Military Law and Practice.....			9
Unassigned.....	33	33	24
Total.....	53	53	53

The major portion of the unassigned hours in subprogram Cq should be devoted to Accounting, Business Management, Statistics, Transportation and Commerce, and other subjects in Economics.

*Members who in the University have passed course 2 or 3, in the Department of Physics, or course 62 in the Department of Political Science (I 12 in Sibley College) are relieved of the requirements of Elementary Physics and of Business Management respectively in subprogram Co and may devote the hours instead to the study of Allied Subjects.

PROGRAM D

GROUP IV

ENGINEER CORPS, SIGNAL CORPS, CHEMICAL WARFARE SERVICE

The following programs, designed by Colleges and Departments of the University to meet the needs of the Engineering Corps, the Signal Corps, or the Chemical War Service, have been accepted as "approved programs" by the District Educational Director for the Committee on Education and Special Training of the War Department.

CHEMICAL WARFARE SERVICE								
For Men who Offered Advanced Mathematics at Admission.								
SUBJECTS	Terms:	1st	2d	3d	4th	5th	6th	7th 8th
Military Instruction.....		11	11	11	6	6	6	6
War Issues.....		9	9					
Introductory Inorganic Chemistry		18						
Analytical Geometry, Differential Calculus, Integral Calculus ...		15	15					
Qualitative Analysis.....			18					
Quantitative Analysis				12				
Experimental Physics.....				12	12			
Organic Chemistry				18	18			
Drawing					8			
Chemical Microscopy.....					9			
Physical Chemistry						18	18	
Advanced Quantitative Analysis Laboratory						6	9	
Technical Gas Analysis						11		
Mechanics of Engineering						12		
Advanced Experimental Physics							12	
Optico-Chemical Methods.....							8	
Organic Analysis. Laboratory .								8
Chemistry of Foods								12
Electro-chemical Analysis								3
Advanced Chemical Microscopy .								6
Mechanical Laboratory								12
Chemistry in Warfare.....								6
Water Analysis								6
Training in Research								12
Electrical Engineering								12
Electro-chemistry								17
Total.....		53	53	53	53	53	53	53

ENGINEER CORPS AND SIGNAL CORPS								
For Men who Offered Advanced Mathematics at Admission to Mechanical Engineering.								
SUBJECTS	Terms:	1st	2nd	3rd	4th	5th	6th	7th 8th
Military Instruction.....		11	11	11	6	6	6	6
War Issues.....		9	9					
Analytical Geometry and Calculus		15	15					
Drawing, A, B, C, D, E, F		6	6	6	6	9	15	
Physics		12	12	12	12			
Introductory Analytical Chemistry				9	9	15		
Mechanics				15	15			
Materials							9	
Thermodynamics, A, B, C, D ...						9	9	9
Electrical Engineering A, B, C, D						9	9	9
{ Mechanical Laboratory (for Engineering Corps) or Radio A, B. (for Signal Corps)								9
Machine Design A, B								15
Additional Eng. Subjects.....					5	5	5	5
Total.....		53	53	53	53	53	53	53

ENGINEER CORPS AND SIGNAL CORPS

For Men who Offered only **Elementary Mathematics** at Admission to the Five-Year Course in Mechanical Engineering.

SUBJECTS	Terms: 1st	2nd	3rd	4th	5th	6th	7th	8th
Military Instruction.....	11	11	11	6	6	6	6	6
War Issues.....	9	9						
Advanced Algebra, Solid Geometry, and Trigonometry.....	12	12						
Drawing, A, B, C, D, E, F.....	6	6	6	6	9	15		
Engineering Principles.....	6	6						
Analytical Geometry and Calculus			15	15				
Physics.....			12	12	12	12		
Introductory Chemistry.....			9	9				
Mechanics.....					15	15		
Materials.....					6			
Electrical Engineering A, B.....							9	9
Thermodynamics A, B.....							9	9
Mechanical Laboratory (for } Engineers Corps) or Radio, A, B (for Signal Corps) } Machine Design.....							15	15
Additional Eng. Subjects.....				5	5	5	5	5
Allied Subjects.....	9	9						
Total.....	53	53	53	53	53	53	53	53

SIGNAL CORPS

For Men Who Offered at Admission Advanced Mathematics, or Elementary Mathematics and either Advanced Algebra or Trigonometry and who need special training in Physics.

SUBJECTS	Terms: 1st	2nd	3rd	4th	5th	6th	7th	8th
Military Instruction.....	11	11	11	6	6	6	6	6
War Issues.....	9	9						
Elementary Physics.....	12	12						
Mathematics.....	12	12	15					
General Physics, a, b.....			9	9				
Physical Measurements, a, b....			9	11				
Photography, or Airplane } Characteristics.....				9				
Chemistry, Inorganic, Physical..		9	9	18				
Properties of Matter.....					15			
Electricity and Magnetism.....						15		
Light.....							15	
Sound and Radiation.....								15
Advanced Laboratory.....					5	5	5	5
Electrical Machinery.....					9			
Alternating Currents.....						9		
Laboratory Research.....							9	9
X-Ray Photography, or } Airplane Theory.....					9			
Advanced Photography, or } Conduction through Gases.. }						9		
Temperature Measurements or } Electric Waves.....							9	
Recent Developments in } Physics, or Radio.....								9
Drawing or French.....					9	9	9	9
Allied Subjects.....	9							
Total.....	53	53	53	53	53	53	53	53

ENGINEER CORPS

For Men who offered Advanced Mathematics at Admission to Civil Engineering.

SUBJECTS	Terms: 1st	2nd	3rd	4th	5th	6th	7th	8th
Military Instruction	11	11	11	6	6	6	6	6
War Issues	9	9						
Military Law and Practice								9
Mathematics	15	15						
Physics		12	12	6		6		
Chemistry			9	9				
Descriptive Geometry	6	6						
Surveying	12							
Drawing				2	5			
Mechanics			15	15				
Surveying			6	15				
Drawing						5	5	
Materials					9			
Materials Laboratory					6			
Geology					9	9		
Railroads							12	3
Engineering Construction								9
Economics					6	6	6	
Bridges					12	9		
Hydraulics							9	
Municipal Sanitation								9
Water Supply								9
Concrete Construction							9	
Engineering Problems							6	
English (Public Speaking)						9		
Engineering Design								8
Survey Computation and Mapping						3		
Total	53	53	53	53	53	53	53	53

Students entering without advanced entrance mathematics will take university courses in Solid Geometry, Advanced Algebra, or Trigonometry 12 hours in the first term, in place of Mathematics 15 hours and in addition a 3-hour course in drawing with corresponding changes in later terms.

PROGRAM E

GROUP V

TRANSPORT SERVICE AND TANK SERVICE

For Men 20 Years Old on September 12, 1918

SUBJECTS	Terms: 1st	2nd	3rd
Military Instruction	11	11	11
War Issues	9	9	9
Military Law and Practice	9		
Unassigned	24		
Contingent upon remaining beyond one term		33	33
Total	53	53	53

For Men 19 Years Old

Military Instruction	11	11	11
War Issues	9	9	9
Military Law and Practice		9	
Unassigned	33	24	
Contingent upon remaining beyond two terms			33
Total	53	53	53

For Men 18 Years Old

SUBJECTS	Terms:	1st	2nd	3rd
Military Instruction.....		11	11	11
War Issues.....		9	9	9
Military Law and Practice.....				9
Unassigned		33	33	24
		<hr/>	<hr/>	<hr/>
Total.....		53	53	53

VETERINARY CORPS

For a course in Veterinary Medicine consult the Veterinary College.

PROGRAM IN LAW

The following program may be taken by all students in Law except Freshmen in the Four-Year Course who will take one of the programs outlined for a specific branch of the Military or Naval Service.

Military Instruction 11 hours; War Issues 9 hours; Military Law and Practice 9 hours; International Law 6 hours; Professional Law Subjects 18 hours. Total 53 hours.

NAVY

- Engineering Division.** Students in this Division will follow one of the approved engineering programs.
- Deck and Line Divisions.** First term for all ages. Programs for subsequent terms will be announced later.

Military Instruction	11 hours
War Issues	9 hours
Astronomy and Navigation	9 hours
Mathematics	12 hours
Geography and Meteorology	12 hours

Total..... 53 hours

MARINE CORPS

Students in this branch of the service will take Program A as outlined for Infantry and Artillery or Program B as outlined for Air Service.

TUITION AND FEES

No changes have been made in the usual tuition charges and fees. Each new student in October, 1918, must therefore pay, at the Treasurer's office, the customary matriculation fee of five dollars before he may register in the University.

Tuition charges and regular fees for students subsequent to their induction into the S. A. T. C. are paid by the Government. Members of the S. A. T. C. must purchase their own text books.

COURSE IN AGRICULTURE

The following course may be taken by students in Agriculture. Before taking this course the student should consult the College of Agriculture concerning its advisability.

Military Instruction 11 hours; War Issues 9 hours; Professional Agricultural Subjects 33 hours. Total 53 hours.

COURSE IN ARCHITECTURE

For a course in Architecture see the College of Architecture.

ALLIED SUBJECTS

To assist S. A. T. C. students in selecting "allied subjects" to fill in the "un-assigned hours" of their programs in the first term this circular records certain changes lately made in courses that were announced last spring by various colleges of the University. It is not possible, at this date, to ascertain all such changes. Therefore students will do well to consult teachers, or departments, regarding any courses previously announced that they may desire to pursue.

Figures following the sign of equality (=) after a course indicate its value in making up an S. A. T. C. program of fifty-three hours. Note that classes at 12 and those at 10 and 11 on Saturday, cannot be fitted into S. A. T. C. schedules, which should also leave either 8 or 9 on Saturdays free for War Issues.

There are included in this circular certain courses, not previously announced, in "essential subjects" of the Navy Program for the Deck and Line Divisions.

This circular supersedes college "Announcements" previously issued in those cases only where it specifically modifies them. In general they should still be consulted as usual.

English. Courses to be given:

1. M W F, 8, 9, 10, 12, 1:30, 2:30;

T Th S, 8, 9, 10, 11, 12.

Apply at Goldwin Smith, 156, on M, T, or W, Oct. 7, 8, 9, for assignment to sections. (=9.)

22. T Th S, 11 only. (=9.)

37. T Th S, 10. (=9.)

41. T Th S, 12. (=9.)

52. M W F, 9. (=9.)

Courses that may be given (consult the teacher, or the Department Office, Goldwin Smith, 159): 11, 12, 38, 42, 50, 71, 72, 76.

Courses not to be given: 3, 5, 8, 10, 20, 32, 39, 47, 49, 56a.

French. For details concerning courses in French, consult the Department, Goldwin Smith, 288.

The following new courses in Military French for S. A. T. C. members will be given (other students not admitted):

M 1. For beginners. (=9.)

M 2. For those who have had one unit of French. (=9.)

M 3. For those who have had two units of French. (=9.)

M 4. For those who have had three units of French. (=9.)

The other courses will be given as announced except:

Course 3 will meet daily. (=18.)

Courses 3a and 5a will not be given.

German. For details concerning courses in German, consult the Department, Goldwin Smith, 182.

The following new courses in Military German for S. A. T. C. members will be given (other students not admitted):

M 1. For beginners. (=9.)

M 2. For those who have had one unit of German. (=9.)

M 3. For those who have had two units of German. (=9.)

M 4. For those who have had three units of German. (=9.)

The following courses will not be given : 8, 10, section 2, 17, 34, 50.

Mathematics. For assignment to sections in courses 0—5 report at White, 8, on October 7, 8, or 9.

Solid Geometry. Once a week. Only for S. A. T. C. students following a D program. (=3.)

1. T Th S, 11 only. (=9.)

2. (replacing 2 and 2E) M T W F, 8, 9, 2:30. (=12.)

3. M W F, 8, 9, 2:30. (=9.)

4. Plane and Spherical Trigonometry, only for S. A. T. C. students following the Navy Program for Deck and Line Divisions. M T Th F, 10, 1:30. (=12.)

5¹. Daily except S, 8, 9, 10. (=15.)

5². Daily except S, 9, 10. (=15.)

5₁ and 5₂ will replace 5₁, 5₂, 6₁, 6₂, 7₁, 7₂ and 8.

15, 17 will not be given.

Courses numbered 19 and above will be given only if there is sufficient demand.

Information regarding hours and prerequisites for these at White, 29.

Physics. War 7. As an allied subject, an additional section is provided at T Th, 9, S, 8, laboratory to be arranged. (=12.)

Course 10. Hours to be arranged, at Rockefeller Hall.

Course 12. Hours to be arranged, " " "

Course 14. Hours to be arranged, " " "

Course 44. Hours to be arranged, " " "

Only the following courses will be given as announced: 4a, 8, 9, 23, 25, 29, 34, 37, 47, 50, 54.

Chemistry 1. M W F, 9 or 10. Laboratory or recitation periods to be assigned for this and other courses in Chemistry at Morse Hall, 1.

Biology 1. Lecture, T Th, 11; Laboratory, T W F, 2-4:30 only. (=9.)

1w. A course in General Biology for S. A. T. C. members only. 1 lecture and 2 laboratory periods. Lecture M or T, 8; Laboratory, 7
Sections: M 9-11 and F, 1:30-3:30, M W, 1:30-3:30; T Th, 8-10, 9-11. Sections assigned at Roberts Hall, 302. (=6.)

Geology. 1. Lectures M W F 9, and laboratory to be arranged.

2. Lectures as announced and laboratory to be arranged.

14. Will be given S at 8.

21. Will be given at hours to be arranged

31. Lectures M W, 10, and lab. M., 1:30-3:30.

The following courses will not be given: 3-6, 8-10, 12-19, 22-24, 32, 34, 35, 37, unless there is sufficient demand, in which case the Department will endeavor to arrange for the courses. Apply to Department, McGraw Hall.

Topography and Map Making. For courses and hours, apply Lincoln Hall, 12.

Geography and Meteorology. For S. A. T. C. students following the Navy Program for Deck and Line Divisions. Lectures or recitations. M W F, 2:30. and two laboratory periods: 1 hour T or Th, 2:30 or W, 1:30 and 2 hours T, W, or Th, 8-10. (= 12.)

Sections assigned at Roberts Hall, third floor. No other course in Meteorology will be given in the first term.

Astronomy and Navigation. 1n. Only for S. A. T. C. students following the Navy Program for Deck and Line Divisions. Two lectures or recitations and one laboratory period. Lectures T Th, 9, 1:30; M Th, 10; laboratory M W F, 8-10. Sections assigned at Lincoln, 12.

Hygiene and Sanitation. War 4. May not be taken in the first term except by students in whose programs it is required in that term.

Descriptive Geometry. For courses and hours apply White Hall, 34, or Lincoln Hall, 12.

Mechanical Drawing. For courses and hours apply East Sibley, 203.

Freehand Drawing. For courses and hours apply White Hall, 34.

Surveying. For other courses than Surveying and Map Making apply Lincoln Hall, 12.

Economics, Accounting, and Government. Changes in hours.

51. Lecture M or T at 9. Students whose lecture comes T will have section assignments Th and Sat at 9. (=9.)

52. See bulletin board Goldwin Smith Hall 252. (=6.)

53a. Lectures T Th, 10. (=9.)

58a. Section No. 2 M W F, 10. (=9.)

59a. Government Accounting M W F, 8. (=9.)

62. T Th, 2:30. (=4.)

76a. M W F, 2:30. Laboratory 3:30. (=9.)

80. T Th S, 9. (=9.)

87a. M W F, 10. (=9.)

Courses not to be given: 55a, 56a, 63a, 64, 65a, 70a, 78a (but see International Law), 91, 93.

History. 22 M W F, 11. For details apply Goldwin Smith 233. (=9.)

63 M W F, 8. (=9.)

Courses not to be given: 23, 28.

International Law. T Th, 8. Boardman Hall, A. Not open to students in S. A. T. C. under nineteen.

History, Geography, Economics. The Background of The War, Historical, Physical, Economic. M W F, 10. (=9.)

A survey of the territorial growth, the scene and environment, and the natural resources of the powers engaged in the great struggle.

ASSOCIATE ALUMNI

By the charter of the University the graduates are entitled to elect two of the Board of Trustees each year. At a meeting called for the purpose and held on Wednesday, June 26, 1872, the day preceding the annual Commencement, representatives of all the classes that had graduated being present, the alumni formed an organization under the name of the Associate Alumni of Cornell University. The declared object of the association was to promote in every proper way the interests of the University and to foster among the graduates a sentiment of regard for each other and of attachment to their Alma Mater. On May 19, 1903, the Association was incorporated under the general laws of the State of New York.

By an amendment to the charter of the University, passed May 15, 1883, permitting members of the alumni, not present in person, to vote by written ballot at the annual election of trustees, the Treasurer of the University is required to keep "a registry of the signature and address of each alumnus." It is therefore important that each alumnus keep the Treasurer of the University informed of his full address (city, street, and number), and notify him immediately of any change.

The following ordinance was adopted by the Board of Trustees, October 24, 1888. All graduates of the first degree, in any of the departments of Cornell University, and all persons who have been admitted to any degree higher than the first in said University shall be alumni of said University, and as such be entitled to vote for alumni trustees under and in pursuance of the provisions contained in chapter 763 of the Laws of New York passed in 1867.

Officers

President.—N. H. Noyes, '06, care of Eli Lilly & Co., Indianapolis.
First Vice-President.—Mrs. G. D. Crofts, '05, 65 Livingston St., Buffalo.
Second Vice-President.—J. P. Dods, '07, 900 South Michigan Avenue, Chicago.
Treasurer.—W. W. Macon, '98, 239 West Thirty-ninth St., New York.
Alumni Recorder.—Woodford Patterson, '95, Morrill Hall, Ithaca.
Secretary.—R. W. Sailor, '07, care of The Cornell Alumni News, Ithaca.

Directors

J. L. Tiernon, jr., '95, 619 White Bldg., Buffalo.
W. R. Webster, jr., '90, 208 Brooklawn Avenue, Bridgeport, Conn.
N. J. Weldgen, '05, 911 Wilder Building, Rochester, N. Y.
J. P. Dods, '08, care of Automobile Blue Book, Chicago.
E. N. Sanderson, '87, 60 Broadway, New York.
Miss Kate Gleason, '88, care of The Gleason Works, Rochester, N. Y.
William Metcalf, jr., '01, 410 Oliver Building, Pittsburgh.
C. L. Bradley, '08, 706 Marion Bldg., Cleveland.
E. T. Foote, '06, care of Cutler-Hammer Mfg. Co., Boston.
J. P. Harris, '01, care of Citizens Savings and Trust Company, Cleveland.
N. H. Noyes, '06, care of Eli Lilly & Co., Indianapolis.

R. W. Sailor, '06, care of Cornell Alumni News, Ithaca.

W. W. Macon, '98, care of Iron Age, New York.

J. A. Pollak, '07, care of Pollak Steel Co., Cincinnati.

Erskine Wilder, '05, 1038 Crosby St., Chicago.

Directors ex officio

E. L. Stevens, '99, president Cornellian Council, Tribune Bldg., New York.

Woodford Patterson, '95, Alumni Recorder, Morrill Hall, Ithaca.

Mrs. G. D. Crofts, '05, vice-president of the Associate Alumni, 65 Livingston St., Buffalo.

E. E. Bogart, '94, president of the Association of Class Secretaries, 166th Street and Boston Road, New York.

A LIST OF CORNELL ALUMNI CLUBS

Before the war there were approximately eighty clubs, all more or less active. A score of these clubs have dropped out of existence, to be revived, for the most part, after conditions have returned to normal and their absent members have re-entered civil life. A list of clubs that are known to have dropped out since 1916, with headquarters city in case of regional clubs, is given below:

Connecticut (Fairfield); New Haven; Springfield, Mass.; Brooklyn; Dutchess County, New York (Poughkeepsie); Northern New York (Watertown); Oswego County (Oswego); Seneca Falls, New York; Albion, New York; Central Pennsylvania (Harrisburg); Luzerne County, Penn. (Wilkes-Barre); Wheeling, West Virginia; North Carolina, (Raleigh); Kansas City; Louisiana (New Orleans); Texas (Houston); Denver; Pacific Northwest (Tacoma); Southern California (Los Angeles); Chicago Women; Pittsburgh Women; and Troy Women.

The list below contains, perhaps, a few clubs that are not known to be active, but in the main they hold some form of meetings and none of them has given notice of suspension of activity.

GENERAL ORGANIZATIONS

The Associate Alumni.—R. W. Sailor, Care Cornell Alumni News, Ithaca.

The Cornell Association of Class Secretaries.—R. W. Kellogg, Ithaca.

The Cornellian Council.—Clara Howard, Morrill Hall, Ithaca.

The Federation of Cornell Women's Clubs.—Clara Howard, Morrill Hall.

The Cornell Bureau, American University Union.—8 Rue de Richelieu, Paris.

ALUMNI ASSOCIATIONS

New England

New England.—Creed W. Fulton, 58 Pearl St., Boston.

New York

New York City.—Foster M. Coffin, 65 Park Avenue.

The Society of Civil Engineers.—E. A. Truran, 33 Lincoln Terrace, Yonkers.

The Lawyers' Association.—John T. McGovern, 141 Broadway, New York.

Ossining.—Judge Milton C. Palmer.

Eastern New York.—C. R. Vanneman, 555 Providence St., Albany.

Schenectady.—J. J. Matson, Consulting Eng. Dept., General Electric Co.
 Otsego County.—E. G. Rathbun, Oneonta.
 Herkimer County.—F. D. McIntosh, Little Falls.
 Utica.—Charles B. Mason, 30 Genesee St.
 Syracuse.—Frederick E. Norton, Syracuse Chamber of Commerce.
 Rochester.—G. E. Wynkoop, 615 Powers Building.
 Binghamton.—A. L. Gilmore, 1104 Press Building.
 Southern Tier.—Frederick B. Gridley, 412 East Second Street, Elmira.
 Western New York.—F. L. Brown, 932 White Building, Buffalo.
 Niagara Falls.—F. L. Lovelace, 730 Main Street.
 Jamestown.—Albert S. Price, 406 Fenton Building.

Eastern States

Northern New Jersey.—H. E. Eberhardt, Maplewood, N. J.
 Northeastern Pennsylvania.—Seth W. Shoemaker, 827 Electric St., Scranton.
 Philadelphia.—R. D. Edwards, 1223 Locust Street.
 Delaware.—Alexander Laird, Odd Fellows Building, Wilmington.
 Maryland.—L. M. Brooks, 261 Roberts St., Baltimore.
 Washington.—L. W. Kephart, Bureau of Plant Industry, 1306 B. Street, S. W.
 Western Pennsylvania.—A. N. Slocum, Westinghouse Building, Pittsburgh.

Middle West

Cleveland.—L. B. Timmerman, 1239 Guardian Building.
 Southern Ohio.—Tell S. Berna, Gwynne Building, Cincinnati.
 Central Ohio.—W. J. Armstrong, in care of Jeffrey Mfg. Co., Columbus.
 Akron.—F. C. Howland, care of The Thomas Phillips Co.
 Toledo.—W. C. Acklin, 1645 Dorr St.
 Dayton.—Barton Myers, with Schaeffer Gengnagel & Co., Schwind Bldg.
 Kentucky.—Adolph Reutlinger, 123 South Third St., Louisville.
 Michigan.—M. A. Beltaire, 679 Atwater, East, Detroit.
 Indiana.—N. H. Noyes, care Eli Lilly & Co., Indianapolis.
 Chicago.—George M. Chapman, 200 N. Jefferson St.
 Milwaukee.—A. H. Candee, 1055 35th St.
 St. Paul.—C. R. Vincent, Pioneer Building.
 St. Louis.—A. J. Widmer, 1013 Syndicate Trust Building.
 Minneapolis.—F. H. Perl, 405 New York Life Building.
 Duluth.—A. T. Banning, jr., 1009 Alworth Building.
 Omaha.—George B. Thimmel, Omaha National Bank Bldg.
 Wichita, Kansas.—Hal M. Black, Wichita Club.
 Utah.—W. M. McCrea, 460 Utah Savings & Trust Bldg., Salt Lake City.
 Logan.—E. G. Peterson, Logan, Utah.
 Spokane.—E. V. Price, care H. C. Whitehouse, Hutton Building.

Pacific Coast

Seattle.—M. R. McMicken, 1630 16th Ave.
 Portland.—H. P. Henry, Yeon Building.
 Northern California.—Dr. J. Traum, Berkeley.

Foreign and Insular

Eastern Canada.—William H. Wardwell, 413 New Birks Building, Montreal.
 Hawaii.—Vaughan MacCaughey, 2404 Oahu Avenue, Honolulu, Hawaii
 The Philippine Islands.—Abraham Gideon, City Hall, Manila.
 North China.—Y. S. Djang, Tientsin, China.

Women's Clubs

Albany.—Miss Inez Kisselburgh, 364 Hamilton St.
 Boston.—Mrs. H. M. Varrell, 37 Concord Avenue, Cambridge.
 Cleveland.—Miss Florence Rosenthal, 10111 Ostend Ave.
 Buffalo.—Miss Grace Laing, 306 Bryant St.
 Ithaca.—Miss Rebecca Harris, 126 Kelvin Place.
 Mohawk Valley.—Miss F. C. Seely, 602 North James St., Rome, N. Y.
 New York.—Miss Mabel E. Rose, 950 Marcy Avenue, Brooklyn.
 Philadelphia.—Miss Olive Long, 4631 Sansom St.
 Rochester.—Miss Gwendolen English, 39 Vick Park A.
 Washington.—Miss Margaret Connor, 3149 Mt. Pleasant St.
 Worcester.—Mrs. H. A. Smith, 20 Trowbridge Road.
 Bay Cities of California.—Mrs. E. A. Weymouth, 5527 McMillan Ave.,
 Oakland.

Committee on Nominations

J. A. Pollak, '07, Chairman, care of Pollak Steel Co., Cincinnati.
 C. L. Bradley, '08, Cleveland.
 C. H. Tuck, '06, China.
 Frederick Willis, '01, 156 Fifth Avenue, New York.
 W. J. Norton, '02, 111 Monroe St., Chicago.
 H. A. Rogers, '03, 127 West Mt. Airy Avenue, Mt. Airy, Pa.
 E. T. Foote, '06, Room 601, 77 Franklin St., Boston.
 R. O. Walter, '01, Auburndale, Mass.
 D. R. Cotton, '05, Pioneer Bldg., St. Paul.
 Dr. I. J. Kerr, '91, Guardian Bldg., Cleveland.

Local Clubs Committee

Erskine Wilder, '05, Chairman, 1038 Crosby St., Chicago.

Sub-chairmen

New England.—E. T. Foote, '06, Cutler-Hammer Mfg. Co., Boston.
 Eastern New York.—F. M. Coffin, '12, 65 Park Avenue, New York.
 Western New York.—N. J. Weldgen, '05, 911 Wilder Bldg., Rochester.
 South Atlantic.—Alfred Huger, '03, Charleston, S. C.
 Northwest.—D. R. Cotton, '05, Pioneer Bldg., St. Paul.
 Middle West.—Gleeson Murphy, '05, Murphy Chair Co., Detroit.
 Southwest.—G. R. Mosher, '08, Finance Bldg., Kansas City, Mo.
 Pacific.—L. R. Goodrich, '08, Thomas Bldg., Oakland, California.
 Women's Clubs.—Miss Clara Howard, '14, Morrill Hall, Ithaca.
 Foreign and Insular.—Woodford Patterson, '95, Morrill Hall, Ithaca.

THE CORNELLIAN COUNCIL

OFFICERS

President—Edward L. Stevens, '99, 154 Nassau St., New York City.

Vice-President—Walter P. Cooke, '91, 1330 Marine Bank Bldg., Buffalo, N. Y.

Acting Secretary—Clara Howard, '14, 27 Morrill Hall, Ithaca, N. Y.

Alumni Recorder—Woodford Patterson, '95, 31 Morrill Hall, Ithaca, N. Y.

The Cornellian Council was founded several years ago by the Alumni of Cornell University for the definite purpose of cultivating and stimulating among Cornell Alumni the habit of giving to the University. It was founded at a time when the University was greatly in need of additional income for operating expenses, for salaries of professors and instructors, for the building of dormitories, and for various other purposes.

The founders had in mind the idea of doing away with indiscriminate solicitation of the Alumni for various University purposes and of having all appeals for the University's needs made by one organization vested with authority. The wisdom of this plan is now acknowledged by the Faculty and Trustees as well as by the Alumni. In this way small gifts to the University are made valuable by reason of their large number and solidarity of purpose, and at the same time an interest is created, which can be created in no other way.

The larger part of the gifts of the Alumni to the Alumni Fund are unrestricted and are available for appropriation by the Trustees where most needed. Gifts to the University through the Alumni Fund may be specifically ear-marked for a special purpose and when so ear-marked are used for that purpose only.

The membership of the Cornellian Council, with which is intrusted the promotion and collection of the Alumni Fund, is made up of one representative from each of the last forty classes and twenty members at large elected by the Council, thus making it a truly representative Alumni body. Payments of all subscriptions to the Alumni Fund are made by checks payable to "Cornell University." These checks as soon as received by the Secretary of the Council are immediately turned over to the Treasurer of the University. From time to time sums are appropriated by the Trustees for the most vital needs of the University.

In the brief existence of the Cornellian Council, more than 7,500 Cornellians have contributed to the Alumni Fund, and over \$200,000 has been placed at the disposal of the Board of Trustees. The larger part of this sum has been used to provide increases in the salaries of professors and teachers, some of whom would otherwise have been lost to the University, and toward the cost of construction of Founders Hall. These represent two of the University's greatest needs. A part of the fund has also been used for University operating expenses and to help pay for a valuable piece of land adjoining Beebe Lake.

HONORARY MEMBERS

Julius Chambers, '70, 312 W. 109th St., New York City.

Frederic Schoff, '71, 26th and Callowhill Sts., Philadelphia, Pa.

Edwin Gillette, '73, Ithaca, N. Y.

Charles S. Harmon, '75, 1205 First National Bank Building, Chicago, Ill.

Jeremiah K. Cady, '76, 172 Washington St., Chicago, Ill.

Merritt E. Haviland, '77, 32 Nassau St., New York City.

Mrs. Bessie DeW. Beahan, '78, 2213 Bellfield Ave., Cleveland, Ohio.

1879—Calvin Tomkins, 30 Church St., New York City.

1880—Hosea Webster, 85 Liberty St., New York City.

1881—Ira A. Place, Grand Central Terminal, New York City.

1882—Dr. Herbert D. Schenck, 75 Halsey St., Brooklyn, N. Y.

1883—Ebenezer B. Turner, Ithaca, N. Y.

1884—Henry J. Patten, 220 Western Union Building, Chicago, Ill.

1885—Robert J. Eidlitz, 30 East 42d St., New York City.

1886—Elias A. deLima, Battery Park National Bank, New York City.

1887—Edwin N. Sanderson, 60 Broadway, New York City.

1888—Albert E. Metzger, 1508 Broadway, Indianapolis, Ind.

1889—Leon Stern, 1017 Chamber of Commerce Building, Rochester, N. Y.

1890—J. Du Pratt White, 14 Wall St., New York City.

1891—Clarence A. Snider, 17 Battery Pl., New York City.

1892—Robert T. Mickle, Stephen Girard Building, Philadelphia, Pa.

1893—E. Vail Stebbins, 42 Broadway, New York City.

1894—Edwin P. Young, Towanda, Pa.

1895—Roger H. Williams, 70 Fifth Ave., New York City.

1896—William W. Ricker, 90 West St., New York City.

1897—James K. Fraser, 95 Madison Ave., New York City.

1898—Ernest M. Bull, 10 Bridge St., New York City.

1899—Edward L. Stevens, jr., 154 Nassau St., New York City.

1900—Arthur P. Bryant, 50 Congress St., Boston, Mass.

1901—John Lawson Senior, 246 Wildwood Ave., Jackson, Mich.

1902—Maurice Whinery, 7 Laight St., New York City.

1903—Raymond P. Morse, Jay and Water Sts., Brooklyn, N. Y.

1904—Harland B. Tibbetts, 37 Wall St., New York City.

1905—Erskine Wilder, 226 W. Lake St., Chicago, Ill.

1906—Roger S. Vail, 110 S. Dearborn St., Chicago, Ill.

1907—Julian A. Pollak, The Pollak Steel Co., Cincinnati, O.

1908—William G. Mennen, 42 Orange St., Newark, N. J.

1909—Robert E. Coulson, c/o Whitman, Ottinger & Ransom, 120 Broadway,
New York City.

1910—Russell B. Hurlburt, 115 Broadway, New York City.

1911—Edwin E. Sheridan, Chicago Car Adv. Co., Chicago, Ill.

1912—Finis E. Yoakum, jr., 2520 Ridge Road, Berkeley, Cal.

1913—George H. Rockwell, 748 Maine St., Cambridge, Mass.

1914—Thomas B. Crews, Washington Hotel, St. Louis, Mo.

1915—Thomas Francis Keating, jr., 11 East 87 St., New York City.

1916—Weyland Pfeiffer, care W. R. Grace & Co., Hanover Sq., New York City.

1917—Donald B. Vail, George Smith Hall, Cambridge, Mass.

1918—Henry W. Roden, 4118 Live Oak St., Dallas, Tex.

MEMBERS AT LARGE

Mrs. A. B. Comstock, '85, Roberts Pl., Ithaca, N. Y.

George B. Kittinger, '85, 659 Colman Block, Seattle, Wash.

Walter P. Cooke, '91, 1330 Marine Bank Bldg., Buffalo, N. Y.

George W. Bacon, '92, 115 Broadway, New York City.
Randall J. Le Boeuf, '92, Albany Trust Bldg., Albany, N. Y.
Edward S. Sanderson, '94, 115 Buckingham St., Waterbury, Conn.
Alice H. Bruère, '95, 400 Riverside Dr., New York City.
Alfred R. Horr, '95, 120 Broadway, New York City.
Francis O. Affeld, jr., '97, 141 Broadway, New York City.
Daniel A. Reed, '98, Red Cross War Council, Washington, D. C.
Walter C. Teagle, '00, Standard Oil Co., 26 Broadway, New York City.
Kelton E. White, '00, 303 N. 4th St., St. Louis, Mo.
Edward R. Alexander, '01, 825 Garfield Bldg., Cleveland, O.
Katherine R. Buckley, '01, 80 Wall St., New York City.
George D. Crofts, '01, Third National Bank Bldg., Buffalo, N. Y.
William Metcalf, jr., '01, 1410 H. W. Oliver Bldg., Pittsburgh, Pa.
Ezra B. Whitman, '01, American Bldg., Baltimore, Md.
Ernest S. Shepherd, '02, Geophysical Laboratory, Washington, D. C.
Clarence F. Hirshfeld, '05, David Whitney Bldg., Detroit, Mich.
Thomas Fleming, jr., '05, Union Bank Bldg., Pittsburgh, Pa.

EX OFFICIO MEMBERS

Nicholas H. Noyes, '06, Eli Lilly & Co., Indianapolis, Ind.
Elmer E. Bogart, '94, 1125 Boston Rd., Bronx, New York City.
Woodford Patterson, '95, 31 Morrill Hall, Ithaca, N. Y.

CORNELL ASSOCIATION OF CLASS SECRETARIES

OFFICERS FOR 1918-1919

President—Elmer E. Bogart, '94, 1125 Boston Rd., Bronx, New York City.

Vice-President—Henry N. Ogden, '89, Ithaca, N. Y.

Treasurer—Henry H. Wing, '81, Ithaca, N. Y.

Secretary—R. W. Kellogg, '12, Ithaca, N. Y.

CLASS SECRETARIES

- 1869—Morris Lyon Buchwalter, 3345 Reading St., Cincinnati, Ohio.
- 1870—Charles Albert Storke, McKay Bldg., Santa Barbara, Calif.
- 1871—Robert Goodloe Harper Speed, 911 E. State St., Ithaca, N. Y.
- 1872—Henry LeRoy Stewart, 508 E. Buffalo St., Ithaca, N. Y.
- 1873—Edwin Gillette, 304 N. Geneva St., Ithaca, N. Y.
- 1874—John Henry Comstock, 123 Roberts Place, Ithaca, N. Y.
- 1875—Henry Woodward Sackett, Tribune Bldg., New York City.
- 1876—Daniel Franklin Flannery, 1200 Westminster Bldg., Chicago, Ill.
- 1877—William Ogden Kerr, 111 Oak Ave., Ithaca, N. Y.
- 1878—Willard Beahan, 2213 Bellefield Ave., Cleveland, Ohio.
- 1879—Calvin Tomkins, 30 Church St., New York City.
- 1880—Addison Delavan Merry, 706 Dillaye Memorial Bldg., Syracuse, N. Y.
- 1881—Henry Hiram Wing, 3 Reservoir Ave., Ithaca, N. Y.
- 1882—Herbert Schenck, 75 Halsey St., Brooklyn, N. Y.
- 1883—Herbert Charles Elmer, Cornell Heights, Ithaca, N. Y.
- 1884—Henry Pelouse de Forest, 59 West 54 St., New York City.
- 1885—Edward Herman Bostwick, Willard Way, Ithaca, N. Y.
- 1886—Luzerne Coville, 514 East Buffalo St., Ithaca, N. Y.
- 1887—Veranus Alva Moore, 914 E. State St., Ithaca, N. Y.
- 1888—Willard Winfield Rowlee, 11 East Ave., Ithaca, N. Y.
- 1889—Henry Neely Ogden, 614 University Ave., Ithaca, N. Y.
- 1890—Charles James Miller, died December 5, 1918.
- 1891—Willard Austen, Cornell University Library, Ithaca, N. Y.
- 1892—Charles Dibble Bostwick, 803 E. Seneca St., Ithaca, N. Y.
- 1893—Clark Sutherland Northup, 407 Elmwood Ave., Ithaca, N. Y.
- 1894—Elmer Ellsworth Bogart, 1125 Boston Road, Bronx, New York City.
- 1895—William Fitch Atkinson, 44 Court St., Brooklyn, N. Y.
- 1896—George Solomon Tompkins, P. O. Box 343, Albany, N. Y.
- 1896—Mrs. C. S. Northup (for women), 407 Elmwood Ave., Ithaca, N. Y.
- 1897—George Nieman Lauman, College of Agriculture, Ithaca, N. Y.
- 1898—Jesse Fuller, jr., 504 Hancock St., Brooklyn, N. Y.
- 1899—Charles Crawford Whinery, 487 Berkeley Ave., S. Orange, N. J.
- 1900—George Harper Young, 162 President's Lane, Quincy, Mass.
- 1900—Mrs. M. H. Kingsbury (for women), 2 South Ave., Ithaca, N. Y.
- 1901—Arthur Sherwood, 52 Vanderbilt St., New York City.
- 1902—William John Norton, Perryman, Md.
- 1902—Mrs. Ruth Bentley Shreve (for women), Hastings-on-Hudson, N. Y.
- 1903—Raymond Parmlee Morse, 1 Carleton Ave., Brooklyn, N. Y.

- 1904—Cecil Jarvis Swan, 816 S. Michigan Ave., Chicago, Ill.
 1904—Dr. Mary Crawford (for women), 100 E. 17th St., New York City.
 1905—Harold Jay Richardson, 131 Dayan St., Lowville, N. Y.
 1906—Ralph H. Wheeler, Acting Secretary, Agricultural College, Ithaca, N. Y.
 1906—Miss Helen Coffin (for women), 47½ Tremont St., Hartford, Conn.
 1907—Antonio Lazo, 120 Broadway, New York City.
 1908—Seth Whitney Shoemaker, 827 Electric St., Scranton, Pa.
 1909—Robert Elias Treman, 411 University Ave., Ithaca, N. Y.
 1909—Mrs. R. W. Sailor (for women), 117 Oak Ave., Ithaca, N. Y.
 1910—Andrew Joseph Whinery, Room 606, 810 Broad St., Newark, N. J.
 1910—Miss Olive Whitson (for women), 302 Wait Ave., Ithaca, N. Y.
 1911—James Edward Oliver Winslow, 65 Park Ave., New York City.
 1911—Miss Clara Vivian Braymer (for women), Temple Place, Granville, N. Y.
 1912—Ross William Kellogg, 109 N. Tioga St., Ithaca, N. Y.
 1912—Miss Nina Smith, (for women), 81 Columbia Heights, Brooklyn, N. Y.
 1913—George Helm Rockwell, 748 Maine St., Cambridge, Mass.
 1913—Miss Sophie M. Becker (for women), 502 N. Calhoun St., Baltimore, Md.
 1914—Heber Wallace Peters, 36 Claremore Ave., New York City.
 1914—Mrs. Howard S. Teall (for women), Sodus, N. Y.
 1915—Robert Whitman White, 1758 Columbia Rd., Washington, D. C.
 1915—Mrs. Sarah Barclay Roper, (for women), 2400 Sixteenth St., Washington, D. C.
 1916—Weyland Pfeiffer, 65 W. 45 St., New York City.
 1916—Mrs. A. J. Mix (for women), 1031 Mississippi St., Lawrence, Kansas.
 1917—Donald Bain Vail, 141 Heights Road, Ridgewood, N. J.
 1918—Henry W. Roden, 27 Morrill Hall, Ithaca, N. Y.
 MED. COLL.—William Henry Cantle, Mamaroneck, N. Y.
 Mary Crawford, 100 E. 17th St., New York City.

HONORARY MEMBERS

- President Jacob Gould Schurman, Ithaca, N. Y.
 Registrar David Fletcher Hoy, '91, Ithaca, N. Y.
 Woodford Patterson, '95, Ithaca, N. Y.
 Edward L. Stevens, '99, President Cornellian Council.
 Nicholas H. Noyes, '06, President Associate Alumni.
 Charles E. Treman, '89, Ithaca, N. Y.
 R. W. Sailor, '07, Ithaca, N. Y.

CLASS MEMORIALS

- CLASS OF 1872:—Seventy-two Elm Trees bordering President's Avenue and northern half of East Avenue.
 CLASS OF 1873:—Drinking Fountain in front of McGraw Hall.
 CLASS OF 1878:—The Class Pipe.
 CLASS OF 1879:—Bronze Tablet containing bust of Bayard Taylor in Sage Chapel.
 CLASS OF 1883:—Portrait of Professor William Dexter Wilson, D.D., LL.D., in the University Library.

- CLASS OF 1884:—Portrait of Professor Charles Chauncey Shackford, A.M., in the University Library.
- CLASS OF 1885:—Statue of Augustus Cæsar in the Museum of Casts.
- CLASS OF 1886:—The '86 Memorial Prize in Junior Oratory.
- CLASS OF 1890:—Cornell Boat House.
- CLASS OF 1891:—The '91 Memorial Fund subject to class action.
- CLASS OF 1892:—The Witherbee Memorial Club House at Percy Field.
- CLASS OF 1893:—The Interscholastic League Prizes in Athletics.
- CLASS OF 1894:—The '94 Memorial Prize in Debate.
- CLASS OF 1895:—The Henley Shell.
- CLASS OF 1896:—Gift toward the establishment of a University Club.
- CLASS OF 1897:—Gift toward the establishment of a University Club.
- CLASS OF 1898:—Gift toward the establishment of a University Club.
- CLASS OF 1898 (College of Law):—Carved oak seat in Boardman Hall.
- CLASS OF 1899:—Gift toward the establishment of an Alumni Hall.
- CLASS OF 1900:—Gift toward the establishment of an Alumni Hall.
- CLASS OF 1901:—Gift toward the establishment of an Alumni Hall.
- CLASS OF 1902:—Gift toward the establishment of an Athletic Field.
- CLASS OF 1903:—Gift toward the establishment of an Athletic Field.
- CLASS OF 1903 (College of Law):—Portraits of Justice Rufus W. Peckham and Joseph H. Choate.
- CLASS OF 1904:—Gift toward an Endowment Fund.
- CLASS OF 1904 (College of Law):—Portraits of James C. Carter and Elihu Root.
- CLASS OF 1905:—Gift toward the establishment of an Alumni Hall.
- CLASS OF 1905 (College of Law):—Portraits of Abraham Lincoln and Thomas M. Cooley.
- CLASS OF 1906:—Gift toward an Endowment Fund.
- CLASS OF 1906 (College of Law):—Portrait of Justice Joseph W. Story.
- CLASS OF 1907:—Gift toward an Endowment Fund.
- CLASS OF 1907 (College of Law):—Portrait of Governor Charles E. Hughes.
- CLASS OF 1908:—Gate for Alumni Field.
- CLASS OF 1908 (College of Law):—Oak seat in Boardman Hall.
- CLASS OF 1909:—Gift toward an Endowment Fund.
- CLASS OF 1910:—Gift toward an Endowment Fund.
- CLASS OF 1910 (College of Law):—Portrait of James Barr Ames.
- CLASS OF 1911:—Gift toward an Endowment Fund.
- CLASS OF 1911 (College of Law):—Portrait of Chief Justice White.
- CLASS OF 1912:—Gift toward an Endowment Fund.
- CLASS OF 1912 (College of Law):—Portrait of Professor William Albert Finch.
- CLASS OF 1913:—Gift toward an Endowment Fund.
- CLASS OF 1914:—Gift toward an Endowment Fund.
- CLASS OF 1915:—Gift toward an Endowment Fund.
- CLASS OF 1916:—Gift toward an Endowment Fund.
- CLASS OF 1917:—Gift toward an Endowment Fund.
- CLASS OF 1918:—Gift toward an Endowment Fund.

CORNELL UNIVERSITY SUMMER SESSION, 1918

OFFICERS

Jacob Gould Schurman, LL.D., President of the University.
 George Prentice Bristol, A.M., Director of the Summer Session.
 David Fletcher Hoy, M.S., Registrar of the University.

*STAFF OF INSTRUCTION

Arthur Augustus Allen, Ph.D., Assistant Professor of Ornithology.	Ornithology
Ruth V. Atkinson, Instructor in Physical Training.	Physical Education
Leila Bartholomew, Teacher of Music, Grammar Schools, Ithaca.	Music
Leslie Nathan Broughton, Ph.D., Assistant Professor of English.	English
Arthur Wesley Browne, Ph.D., Professor of Chemistry.	Chemistry
Laura Bryant, Supervisor of Music, Ithaca Public Schools.	Music
Murray Wright Bundy, M.A., Instructor in English.	English
Earle Nelson Burrows, M.C.E., Assistant Professor of Bridge Engineering.	Engineering
Clayton Joseph Buttery, M.A., Instructor in Romance Languages.	French
Robert Argyll Campbell, A.B., Lecturer in Economics.	Economics
Ellen Brainard Canfield, Instructor in Physical Training.	Physical Education
Walter Buckingham Carver, Ph.D., Assistant Professor of Mathematics.	Mathematics
Ralph Thomas Kline Cornwell, Assistant in Chemistry.	Chemistry
Frank H. Cowles, Ph.D., Professor of Latin, Wabash College.	Latin
James Edwin Creighton, LL.D., Professor of Philosophy.	Philosophy
Hollis Dann, Mus.D., Professor of Music.	Music
Herbert Joseph Davenport, Ph.D., Professor of Economics.	Economics
Charles Love Durham, Ph.D., Professor of Latin.	Latin
Ellsworth David Elston, B.A., Instructor in Physical Geography.	Physical Geography
Oscar Diederich von Engeln, Ph.D., Assistant Professor of Physical Geography.	Geography
Clyde Olin Fisher, M.A., Instructor in Economics.	Economics
John Edward Foglesong, M.A., Instructor in Chemistry.	Chemistry
Jean Marius Gelas, Instructor in U. S. Military Academy, West Point.	Physical Training
Roswell Clifton Gibbs, Ph.D., Assistant Professor of Physics.	Physics
Allan H. Gilbert, Ph.D., Instructor in English.	English
David Clinton Gillespie, Ph.D., Assistant Professor of Mathematics.	Mathematics
Josephine Mixer Gleason, Ph.D., Instructor in Psychology.	Psychology
Frank Alexander Griffin, Assistant in Chemistry.	Chemistry
J. Earl Griffith, Head of Department of Drawing and Art, Central High School, Newark, N. J.	Drawing and Art
Othon Goepp Guerlac, Licencié ès lettres, LL.B., Assistant Professor of French,	French History
William H. Hoerrner, Professor of Music, Colgate University.	Music
Louis Benjamin Hoisington, B.A., Instructor in Education.	Education
Helen Allen Hunt, Teacher of Music, Boston, Mass.	Music
Wallie Abraham Hurwitz, Ph.D., Assistant Professor of Mathematics.	Mathematics
Fernand Désiré Anselme Ferdinand Jagu, Licencié en droit, Instructor in the Romance Languages.	French
Arthur Edward Johnstone, Teacher of Music, New York City.	Music
Lester Spruce Kennell, M.A., Instructor in Romance Languages.	Spanish
Ernest R. Krøger, Teacher of Music, St. Louis, Mo.	Music
Michael Lake.	Psychology
William Edward Lunt, Ph.D., Professor of History, Haverford College.	History
William Garfield Mallory, A.M., Instructor in Physics.	Physics
James Frederick Mason, Ph.D., Professor of Romance Languages.	French
David E. Mattern, B.A., Teacher of Music, Ithaca Public Schools.	Music

*The names of the instructors in the College of Agriculture are given on page 207.

Edith Hedges Matzke, M.D., Adviser of Women.	Hygiene
Victor Elvert Monnett, B.A., Assistant Professor of Geology, University of Oklahoma.	Geology
Benton Sullivan Monroe, Ph.D., Assistant Professor of English.	English
Marcel Moraud, Bachelier ès Lettres, Washington, D. C.	French
Guy Brooks Muchmore, B.A., Assistant Professor of Public Speaking.	Public Speaking
Clarke Sutherland Northup, Ph.D., Assistant Professor of English.	English
John Nelson Norwood, Ph.D., Professor of History and Political Science, Alfred University.	History
Robert Morris Ogden, Ph.D., Professor of Education.	Education
William Ridgely Orndorff, Ph.D., Professor of Chemistry.	Chemistry
Samuel Peter Orth, Ph.D., Professor of Political Science.	Government
Frederick William Owens, Ph.D., Assistant Professor of Mathematics.	Mathematics
Miles Albion Pond, Ph.B., Assistant Professor of Civil Engineering.	Descriptive Geometry
Paul Russel Pope, Ph.D., Professor of German.	German
James T. Quarles, A.A.G.O., University Organist and Assistant Professor of Music.	Music
Harold Lyle Reed, Ph.D., Assistant Professor of Economics.	Economics
Ernest William Rettger, Ph.D., Assistant Professor of Applied Mechanics.	Mechanics
Floyd Karker Richtmyer, Ph.D., Assistant Professor of Physics.	Physics
Arthur John Rider, M.S., Instructor in Chemistry.	Chemistry
Guillermo Rivera, M.A., Instructor in Spanish, Harvard University.	Spanish
Louis A. Roux, B.A., Teacher of French, Newark Academy.	French
Burton T. Scales, M.A., Director of Music, Girard College.	Music
Albert Ray Shadle, M.S., Instructor in Zoology.	Zoology
Francis Robert Sharpe, Ph.D., Assistant Professor of Mathematics.	Mathematics
Luis N. Sherwell, Teacher of Spanish, Stuyvesant High School, New York City.	Spanish
Edith M. Stone, Director of Music in Public Schools, Jackson, Mich.	Music
William Strunk, Jr., Ph.D., Professor of English.	English
Cony Sturgis, B.A., Acting Assistant Professor of Romance Languages.	Spanish
Paul Halladay Underwood, C.E., Assistant Professor of Engineering.	Mechanics
Richard John Watters, jr.	Mechanical Engineering
Harry Porter Weld, Ph.D., Assistant Professor of Psychology.	Psychology
Anna Laura White, Assistant in Physics.	Physics
Bernice White, Instructor of Music, Normal College, New York City.	Music
Cornelia Williams, Principal, South Hill School, Ithaca.	Music
James Albert Winans, M.A., Professor of Public Speaking.	Public Speaking
E. Jane Wisenall, Teacher of Music in High Schools, Cincinnati, Ohio.	Music
Harry Elmsley Wood, Director of Manual Training, Indianapolis, Ind.	Industrial Education
Ralph W. G. Wyckoff, B.S., Instructor in Chemistry.	Chemistry
Wesley Daniel Zinnecker, Ph.D., Instructor in German.	German

There are no academic requirements for admission to the Summer Session except in the case of the College of Agriculture.

Teachers, supervisors, superintendents, extension workers, and others concerned with activities of an educational nature are admitted to Summer Session courses in the College of Agriculture regardless of previous academic preparation; others are admitted only on the submission of evidence of having satisfactorily completed at least two years of work in Cornell University or some other institution of equal standing.

Each student in the Summer Session must satisfy the instructor in charge of a course (unless it is elementary) that he is qualified to undertake the work of the course.

Credit toward an undergraduate degree may be obtained by students regularly registered in one of the colleges of Cornell University. For credit toward the degree A.B., see page 64; for credit toward other undergraduate degrees, see the announcements of the respective courses in the Summer Session.

Students of the Summer Session who are not matriculated in the University may receive certificates of attendance and of work satisfactorily performed.

For the conditions under which graduate work may be pursued during the Summer Session, see page 48.

The tuition for the Summer Session is \$30. A registration fee of \$5 is charged each student who registers for the first time in the Summer Session. Tuition is free to students from New York State if all their work is in subjects taught in the College of Agriculture; if any of their work is outside of the College of Agriculture, they must pay the regular tuition fee of \$30.

The residential halls, the libraries, and the infirmary are open during the Summer Session.

COURSES OF INSTRUCTION

EDUCATION

- S 1. **Educational Psychology.** Professor OGDEN. Daily except Sat., 11. Credit, two hours.
- S 2. **Principles of Education.** Professor OGDEN. Daily except Sat., 9. Credit, two hours.
- S 3. **History of Education.** Lectures, recitations, and prescribed readings. Mr. HOISINGTON. Daily, except Sat., 10. Credit, two hours.
- S 7. **Mental Tests.** Mr. HOISINGTON. Lectures, M W F, 12; laboratory, T Th, 2-4.30. Credit, two hours.

TRAINING COURSE FOR PSYCHOLOGICAL EXAMINERS

The demand for psychologists trained to administer mental tests has become urgent. The Government has organized a psychological corps to examine and pass upon the mental fitness of every recruit in the National Army. The demand for examiners in the educational field also is urgent. To assist in meeting these needs, the Departments of Education and Psychology call special attention to courses in Introductory, Experimental, and Educational Psychology, and to the course in Mental Tests. Advice in the selection of courses may be had by consulting Professor R. M. OGDEN.

PHYSICAL EDUCATION AND PHYSICAL TRAINING FOR WOMEN

Physical Examinations and Personal Conferences. Offered to all women registered in the Summer Session. Doctors MATZKE and GORDON.

- S 1. **Personal and School Hygiene and School Inspection.** Daily, except Sat. Dr. MATZKE.
- S 2. **First Aid and Home Nursing.** Daily, except Sat. Dr. MATZKE.
- S 3. **Gymnastics: School-Room and Playground.** Daily except Sat. Credit, one hour.
- S 4. **Organization and Administration of Playgrounds.** Daily except Sat. Credit, one hour.
- S 5. **The Teaching of Rhythm, Singing Games, Elementary Folk and Aesthetic Dancing.** Daily except Sat. Credit, one hour.
- S 6. **Advanced Course in Rhythm, Singing Games, Folk-Dancing, and Aesthetic Dancing.** Daily except Sat. Credit, one hour.
- S 7. **Swimming and Fencing.** For this instruction a special charge is made: for swimming, \$10; for fencing, \$5, including outfit. Mr. GELAS.

MANUAL TRAINING, DRAWING, DESIGN

- S 1. **Manual Training for the Lower Grades.** Daily except Sat., 2-4. Mr. WOOD.
 - S 2. **Wood Work for Pre-vocational and Junior High Schools.** Daily, 8-11. Mr. HOOPER.
 - S 3. **Wood Working for Secondary Schools.** Mr. HOOPER.
 - S 5. **Shop Lectures and Conferences.** Mr. WOOD.
 - S 6. **Foundry Work for Secondary and Trade Schools.**
 - S 7. **Forging for Secondary and Trade Schools.**
 - S 8. **Machine Work for Secondary and Trade Schools.**
 - S 9. **Freehand Drawing for Elementary and Secondary Schools.** Credit, two hours. Mr. GRIFFITH.
 - S 10. **Design, Fine and Applied Art.** (Open only to students who have completed course S 9 or its equivalent.) Credit, two hours. Mr. GRIFFITH.
- Students who have completed courses S 9 and S 10 may continue their study, if so desired.
- S 11. **Mechanical Drawing for Secondary Schools.**

PSYCHOLOGY

- S 1. **Introduction to Psychology.** Credit, two hours. Assistant Professor WELD and Mr. ZIGLER.
- S 2. **Physiological Psychology.** Credit, one hour. T Th, 11. Assistant Professor WELD.
- S 4. **Introductory Laboratory.** Credit, two hours. M W F, 2.00-4.30. Assistant Professor WELD, Mr. ZIGLER, and Dr. GLEASON.
- S 5. **Quantitative Laboratory.** Credit, two hours. M W F, 2.00-4.30. Assistant Professor WELD, Mr. ZIGLER, and Dr. GLEASON.
- S 6. **Advanced Work in Psychology.** Hours and credit to be arranged. Assistant Professor WELD and Mr. ZIGLER.

As a prerequisite for this course, Course S 4, or its equivalent, is necessary.

PHILOSOPHY

- S 1. **The Development of Modern Philosophical Thought.** Daily except Sat., 8. Professor CREIGHTON.
- S 2. **Contemporary French Philosophical Thought.** M W F, 12. Professor CREIGHTON.
- S 3. **Philosophical Results and Applications.** T Th, 12. Professor CREIGHTON.

ENGLISH

Courses S 1 and S 2 taken together will be considered the equivalent of the first term of course 1 or of course 3 in the regular University session. Courses S 1 and S 3 taken together will be considered the equivalent of the second term of course 1 or of course 3. But courses S 1, S 2, and S 3 taken together will not be considered the equivalent of both terms of course 1 or of course 3.

- S 1. **Composition.** Daily except Sat., 8. Credit, two hours. Mr. BUNDY.
- S 2. **Introductory Course in Literature.** Daily except Sat., 9. Credit, two hours. Mr. BUNDY.
- S 3. **Shakespeare.** Daily except Sat., 10. Credit, two hours. Dr. GILBERT.
- S 4. **Advanced Composition.** Daily except Sat., 11. Credit, two hours. Dr. GILBERT.
- The course is open to any who have completed course S 1 or its equivalent.
- S 5. **Teachers' Course.** Daily except Sat., 9. Credit, two hours. Assistant Professor NORTHUP.
- S 6. **Victorian Literature.** Daily except Sat., 12. Credit, two hours. Assistant Professor NORTHUP.
- This course does not cover the ground of course S 2.
- S 7. **Nineteenth Century Poetry.** Daily except Sat., 8. Credit, two hours. Assistant Professor BROUGHTON.
- S 8. **Nineteenth Century Prose.** Daily except Sat., 9. Credit, two hours. Assistant Professor MONROE.
- S 9. **American Literature.** Daily except Sat., 12. Credit, two hours. Assistant Professor BROUGHTON.
- S 10. **The English Language.** Daily except Sat., 8. Credit, two hours. Assistant Professor MONROE.
- S 11. **Modern Drama.** Daily, except Sat., 10. Credit, two hours. Professor STRUNK.
- S 12. **Recent English Poetry.** Daily except Sat., 11. Credit, two hours. Professor STRUNK.
- S 13. **Old English.** Daily except Sat., 11. Credit, two hours. Assistant Professor MONROE.

PUBLIC SPEAKING—ORAL ENGLISH

- S 1. **Public Speaking.** Daily except Sat., 8. Credit, two hours. Professor WINANS.
- Regular students passing this course will be admitted to the work of the second term in Public Speaking, course 1.
- S 2. **Voice Training.** Daily except Sat., 9. Credit, one hour. Special work may be arranged with the instructor for one hour additional credit. Assistant Professor MUCHMORE.
- S 3. **Oral English for Teachers.** M W F, 10. Credit, one hour. Consent of instructor necessary for admission. Professor WINANS.
- With this course should be taken other courses in this department, particularly S 1.
- S 4. **Oral Reading.** Daily, except Sat., 11. Credit, two hours. Assistant Professor MUCHMORE.
- Regular students who pass this course will be admitted to the second term in Oral Reading, course 10.
- [The Production of School Plays. M W F, 9. Credit, one hour. Consent of instructor necessary for admission.] Not given in 1918.

FRENCH

- S 1. **First Year French.** Daily except Sat., 8 and 12. Mr. ROUX. University credit, four hours. Entrance credit, one unit.
- S 2. **Second Year French.** Daily except Sat., 8 and 12. Mr. MORAUD. University credit, four hours. Entrance credit, one unit.
- S 3. **Third Year French.** Daily except Sat., 8 and 12. Mr. BUTTERY. University credit, four hours. Entrance credit, one unit.
- S 4. **Elementary Composition and Conversation.** Daily except Sat., 10. Mr. BUTTERY. Credit, two hours.
- S 5. **Advanced Composition and Conversation.** Daily except Sat., 8. Professor MASON. Credit, two hours.
- S 6. **Contemporary French Literature.** Daily except Sat., 11. Professor MASON. Credit, two hours.
- [Old French Texts. This course is given in alternate years.] Not given in 1918.
- S 7. **Teachers' Course.** Daily except Sat., 10. Mr. ROUX.
- S 8. **French Phonetics.** Daily except Sat., 9. Professor MASON. Credit, two hours. This course is recommended to students taking course S 4 or S 5.

S 9. **Military French.** Daily except Sat., 10. Mr. MORAUD. Credit, two hours.

History of France under the Third Republic. See page 203.

France and the French of Today. See page 203.

France and the United States. See page 203.

French Philosophy. See page 201.

French Conversation. In order to afford additional opportunity for the use of French, special reservation of one wing of Prudence Risley Hall, is made for teachers, actual or prospective, of French, and a special table, at which French only is spoken, is maintained in the dining room of the same building. A competent and skilled teacher of French presides at this table, and organizes other ways of a recreative kind for the use of French in the daily life of the students.

SPANISH

S 1. **First Year Spanish.** Daily except Sat., 8 and 12. Mr. KENNEL. University credit, four hours. Entrance credit, one unit.

S 2. **Second Year Spanish.** Daily except Sat., 8 and 12. University credit, four hours. Entrance credit, one unit. Mr. SHERWELL.

S 3. **Third Year Spanish.** Daily except Sat., 8 and 12. Mr. RIVERA. University credit, four hours. Entrance credit, one unit.

S 4. **Advanced Translation.** Daily except Sat., 12. Acting Assistant Professor STURGIS. University credit, two hours. Intended primarily for teachers.

S 5. **Elementary Spanish Composition and Conversation.** Daily except Sat., 11. University credit, two hours. This course may be profitably taken in connection with Course S 3.

S 6. **Advanced Spanish Composition and Conversation.** Daily except Sat., 11. Acting Assistant Professor STURGIS. University credit, two hours.

S 7. **Spanish Commercial Correspondence.** Daily except Sat., 9. Mr. RIVERA. University credit, two hours.

S 8. **Spanish-American History.** Daily except Sat., 10. Acting Assistant Professor STURGIS. University credit, two hours.

Spanish Conversation. In order to afford additional opportunity for the use of Spanish, special reservation of one wing of Prudence Risley Hall is made for teachers, actual or prospective, of Spanish, and a special table, at which Spanish only is spoken, is maintained in the dining room of the same building. A competent and skilled teacher of Spanish presides at this table, and organizes other ways of a recreative kind for the use of Spanish in the daily life of the students.

GERMAN

S 1. **First Year German.** Daily except Sat., 8 and 12. Professor POPE. University credit, four hours. Entrance credit, one unit.

S 2. **Second Year German.** Prerequisite: one year of high school German or its equivalent. University credit, four hours. Daily except Sat., 8 and 12.

S 3. **Third Year German.** Prerequisite: two years of high school German or its equivalent. The completion of this course entitles the student to the third unit of entrance credit in German. Daily 8 and 12. Dr. ZINNECKER. University credit, five hours.

S 4. **Advanced Composition and Conversation.** Daily except Sat., 9. Dr. ZINNECKER. Credit, two hours.

S 5. **Life and Works of Schiller.** Daily except Sat., 10. Professor POPE. Credit, two hours.

LATIN

S 1. **Third Year Latin, Cicero.** Daily except Sat., 8 and 12. University credit, four hours. Entrance credit, one unit. Professor COWLES.

S 2. **Latin Composition, and Teaching of it in the High School.** Daily except Sat. 10.

S 3. **Latin Language and Latin Syntax.** Daily except S., 8. Professor DURHAM.

S 4. **Martial's Epigrams.** Daily except S., 9. Professor DURHAM. Courses S 3 and S 4 are primarily for teachers and graduate students.

HISTORY AND GOVERNMENT

S 1. **American Government and Politics.** Daily except Sat., 8. Credit, two hours.

S 2. **American History. The Period of Civil War and Reconstruction, 1850-1875.** Daily except Sat., 10. Credit, two hours. Professor BRETZ.

[**American History.** Daily except Sat., 10. Credit, two hours. Professor BRETZ.] Not given in 1918.

[**American History. The Middle Period, 1815-1860.** Professor BRETZ.] Not given in 1918.

S 5. [**English History to 1485.** Professor LUNT.] Not given in 1918.

S 6. **English History, 1485-1917.** Daily except Sat., 10. Credit two hours. Professor LUNT.

S 7. **English History since 1815.** Daily except Sat., 9. Credit, two hours. Professor LUNT.

S 8. **Seminary in English History.** One two-hour session each week. Professor LUNT.

- S 9. **History of France Under the Third Republic.** Daily except Sat., 9. Assistant Professor GUERLAC. Credit, two hours.
- S 10. **France and the French of To-day.** M W F, 11. Assistant Professor GUERLAC. Credit, one hour.
- S 11. **Relations Between France and the United States.** T Th, 11. Assistant Professor GUERLAC. Credit, one hour.
- S 12. **American Political Institutions.** Daily except Sat., 10. Professor ORTH. Credit, two hours.
- S 13. **The American Party System.** Daily except Sat., 12. Professor ORTH. Credit, two hours.

ECONOMICS

- S 1. **Principles of Economics.** Twice daily except Sat., 8 and 9. Credit four hours. Mr. FISHER.
- S 2. **Money and Credit.** Daily except Sat., 9. Credit, two hours. Assistant Professor REED.
- S 3. **Theory and History of Banking.** Daily except Sat., 12. Credit, two hours. Assistant Professor REED.
- S 4. **Corporation Finance.** Daily except Sat., 11. Credit, two hours. Assistant Professor REED.
- [Elements of Accounting. Credit, two hours. Assistant Professor ENGLISH.] Not given in 1918.
- [Interpretation of Accounts. Credit, two hours. Assistant Professor ENGLISH.] Not given in 1918.

MATHEMATICS

In addition to the courses noted below, each teacher will have regular office hours for consultation with students.

In the following list, courses 1 to 6 (2) are the equivalent of those having the same number in the Announcement of the College of Arts and Sciences for 1917-1918.

Courses 1, 2, 3 are equivalent to the advanced entrance requirements of Cornell University and of the College Entrance Examination Board. They presuppose a ready knowledge of elementary algebra (through quadratic equations) and of plane geometry. University credit, for 1, 2, 3, three hours each.

S 1. **Solid Geometry.** Daily, 11. Assistant Professor CARVER.

S 2. **Advanced Algebra.** Daily, 10. Assistant Professors CARVER and HURWITZ.

S 3. **Trigonometry.** Daily, 9. Assistant Professor HURWITZ.

Students taking S 6 (1) or S 6 (2) are advised to take no other University work during the summer.

University credit for S 6 (1) and for S 6 (2) six hours each.

S 6 (1). **Analytic Geometry and Calculus.** Daily, 8 and 11. Assistant Professor OWENS.

S 6 (2). **Analytic Geometry and Calculus.** Daily, 8 and 11. Assistant Professors SHARPE and GILLESPIE.

Mathematics for Teachers

S 7. **Projective Geometry.** M W F, 10. Credit one hour. Assistant Professor OWENS.

S 8. **Selected Topics Related to Elementary and Advanced Algebra.** M W F, 11. Assistant Professor HURWITZ.

S 9. **Selected Topics Related to Plane and Solid Geometry.** M W F, 9. Assistant Professor CARVER.

PHYSICS

S 2. **Lectures with Experiments and Recitations.** Credit five hours. Daily 8-10.

S 3. **Lectures, Recitations, and Problems.** Credit six hours. Assistant Professor GIBBS.

S 5. **Informal Conference Work for Teachers.** Assistant Professor GIBBS. No University credit.

S 8. **General Physics.** Credit two hours. Prerequisites; Physics 3 or the equivalent and a working knowledge of analytic geometry and the calculus. Daily except Sat., 8.

S 9. **General Physics.** A continuation of Physics 8. Prerequisite: Physics 8. Daily except Sat., 9. Credit, two hours. Assistant Professor RICHTMYER.

S 10. **Physical Laboratory.** Credit one to three hours. Prerequisite Physics S 2 or the equivalent. (Open to students taking Physics S 2 simultaneously). Assistant Professor RICHTMYER.

S 12. **Physical Experiments.** Credit one to four hours. Prerequisites: the equivalent of eight hours of college physics (unless either Physics 8 or 9 be taken in parallel) and a knowledge of the elements of analytic geometry and the calculus. Daily, except Sat., 10-1 (or 9-12 by special arrangement). Assistant Professor RICHTMYER.

S 14. Physical Experiments. Students of whom Physics 14 is required in the regular academic year may substitute therefor Physics 12, as given in the summer session.

Advanced General Physics. The following courses S 20a to S 23b, are suggested for students desiring to elect theoretical Physics in Summer Sessions. The two parts of any topic are substantially equivalent to the corresponding courses as given during the college year. It is expected to complete this sequence of courses once in four summer sessions. A student may elect either part of any of the topics without the other. In general those taking any of these courses should have completed the equivalent of Physics 2, 4, and 10 of the college year.

These courses may be taken for credit toward a master's degree in physics, subject to the requirements of the graduate school.

[S 20a. **Heat.**] Not given in 1918.

[S 20b. **Heat.**] Not given in 1918.

S 21a. **Light.** Daily except Sat., 8. Mr. MURDOCK.

[S 21b. **Light.**] Not given in 1918.

[S 22a. **Electricity and Magnetism.**] Not given in 1918.

[S 22b. **Electricity and Magnetism.**] Not given in 1918.

[S 23a. **Properties of Matter.**] Not given in 1918.

S 23b. **Properties of Matter.** Daily except Sat., 12. Mr. MURDOCK.

S 25. Advanced Laboratory Practice. Open to those students who have had Physics 12 or its equivalent. Credit varies with the amount of work done. Mr. MURDOCK and other members of the staff.

S 44. **X-Ray Laboratory.** July 29 to August 16, daily except Sat., 2 to 4. Mr. LARKIN.

S 75. **Special Topics or Investigation.** Credit varies with the nature and amount of work done.

CHEMISTRY

S 1. Introductory Inorganic Chemistry. a. Lectures daily except Sat., 12. Professor BROWNE and Mr. GRIFFIN.

b. Laboratory work, M, W, 8-12, and T Th F, 9-12. Mr. FOGLESONG.

c. Recitations. T Th F, 8. Mr. FOGLESONG.

Credit for a, b and c, six hours.

S 6. Elementary Qualitative and Quantitative Analysis. Credit, two, three, or five hours.

A. Qualitative Analysis. Lectures, M W F, 11. Laboratory, daily except Sat., 1.30-4.30. Mr. RIDER. An elementary course for those who have had the equivalent of course A.

B. Quantitative Analysis. Elementary. Lectures, T Th, 11. Laboratory, M W F, 8-11. Credit, two hours. Mr. WYCKOFF.

Advanced work (see course S 14) may be taken by students who complete this course before the close of the session.

S 7. Qualitative Analysis. Lectures and recitations, daily except Sat., 8. Laboratory work daily except Sat., 1.30-4.30, and M W F, 9-12. Mr. RIDER. Credit, one to six hours.

S 12. Quantitative Analysis. Lectures, daily except Sat., 8. Laboratory, daily except Sat., 9-1. Mr. WYCKOFF. Credit, four, five, or six hours.

S 14. Quantitative Analysis, Advanced Course. Laboratory practice. Credit, one, two, three, or four hours. Mr. WYCKOFF.

S 16. Electrochemical Analysis. Laboratory practice. Credit, one hour. Mr. WYCKOFF.

[S 19. **Qualitative and Quantitative Gas Analysis.** Lectures, daily except Sat., 12. Credit, two hours.] Not given in 1918.

[S 20. **Technical Gas Analysis.** Laboratory practice. Credit, two hours.] Not given in 1918.

[S 24. **Opticochemical Methods.** Lectures, daily except Sat., 12. Laboratory practice. Credit, three hours.] Not given in 1918.

S 30. Organic Chemistry. A. Aliphatic compounds. Lectures and recitations. Daily except Sat., 8. Laboratory practice. Credit, four to six hours.

[B. Aromatic compounds. Lectures and recitations. Daily except Sat., 10. Laboratory practice. Credit, four to six hours.] Not given in 1918.

This course presupposes a knowledge of elementary chemistry.

S 31. Organic Chemistry. A. Aliphatic compounds. Lectures and recitations. Daily except Sat., 8. Credit, three hours. Mr. JACKSON and Mr. CORNWELL.

[B. Aromatic compounds. Lectures and recitations. Daily except Sat., 10. Credit, three hours.] Not given in 1918.

These lectures and recitations are the same as those of Course S 30. Course S 30 should be taken in preference to course S 31 whenever it is possible.

S 32. Organic Chemistry, Shorter Course. Lectures and recitations. Daily except Sat., 8. Laboratory practice. Credit four hours. Mr. JACKSON and Mr. CORNWELL.

Course S 32 presupposes a knowledge of elementary chemistry, and is designed more particularly for students registered in the Colleges of Medicine and Agriculture.

S 34. Advanced Organic Chemistry. Laboratory practice. Credit, two or more hours.

S 37. Methods of Organic Analysis. Laboratory practice with occasional lectures. Credit two or more hours. Mr. JACKSON.

[**S 48. Selected Topics in Advanced Inorganic Chemistry.** Lectures, M W F, 10. Credit, one hour.] Not given in 1918.

[**S 69. Elementary Sanitary Chemistry.** Lectures, recitations, and laboratory practice. Credit, five hours. Lectures daily except Sat., 8. Presupposes a knowledge of qualitative and quantitative analysis, and of organic chemistry.] Not given in 1918.

S 96. Research. Credit, one to six hours. Open to senior chemists, and others by special permission.

GEOGRAPHY AND GEOLOGY

For entrance credit ($\frac{1}{2}$ unit) in physical geography, a student is required to attend, complete all required work, and pass the examinations in courses S 1, S 8, and S, 10.

Lecture Courses in Geography and Geology

S 1. Physical Geography. Students registering in this course are advised to take also the related courses S 8 and S 10, and if possible S 5. M T W Th, 9. Assistant Professor VON ENGELN. Credit, two hours.

Meteorology. See page 208.

S 2. Commercial and Industrial Geography. M T W Th, 11. Assistant Professor VON ENGELN. Credit, two hours.

S 5. Geology. A General Introductory Course. M T W Th, 10. Assistant Professor MONNETT. Credit, two hours.

Students registering for this course are urged to take the laboratory course S 9, and, if possible, course S 10.

Laboratory and Excursion Courses in Both Geography and Geology

S 8. Physical Geography, Laboratory Course. Laboratory fee, \$1. T Th, 2-4. Mr. ELSTON. Credit, one hour.

S 9. Geology, Laboratory Course. W F, 2-4. Assistant Professor MONNETT. Credit, one hour. This course is designed to supplement course S 5. Laboratory fee \$1.

S 10. Geography and Geology, Field Course. A series of excursions under the direction of Assistant Professor VON ENGELN and other members of the staff. This course should be elected by all those registering in course S 1 or S 5 and is required of all those who desire entrance credit in physical geography. With courses S 1 and S 8 it affords a comprehensive course in physical geography; with courses S 5 and S 9 it will give a similarly broad training in elementary geology, as the dynamic phases of geology are emphasized on the excursions. Excursions 1, 2, 3, 5, 6 are required of all students in the course, and in addition they must take either two of 7, 8 and 9; or one of 10 and 11 for one hour's credit. Excursions 1-6, Monday afternoons; 7, 8, 9, 11, all day Saturday; 10 starts on Saturday.

ZOOLOGY

S 1. General Zoology. Lectures daily except Sat., 9. Laboratory daily except Sat., 2-5.30. Credit six hours. Mr. SHADLE. Laboratory fee, \$6.

S 2. Teachers' Course. Presupposes a training equivalent to that given in course A. Credit one or more hours. Mr. SHADLE.

S 3. Ornithology. Credit, three hours. Lectures T Th, 10. Laboratory M W or T Th, 2-5. Field work M W or T Th, 5.30-8 a. m. Laboratory fee, \$1.50. Assistant Professor ALLEN.

SHOP WORK AND DRAWING FOR ENGINEERING STUDENTS

Drawing

S 1. Mechanical Drawing. M W F, 8-11 and daily except Sat., 2-5.

S 2. Machine Sketching and Drawing. For those who have had the equivalent of course S 1. M W F, 8-11 and daily except Sat., 2-5.

S 3. Descriptive Geometry. Lectures, daily except Sat., 9. Recitations and drawing daily except Sat., 10-12. Assistant Professor POND. The work is the same as that given in the regular C.E. course 1, and the student will receive four hours credit if he takes the whole course. A three-hour course which fulfills the requirements for the Mechanical Engineering students of Sibley College will also be given.

Shop Work

S 4. Pattern Making.

S 5. Foundry Work.

S 6. Forging, welding, tempering, etc.

S 7. Machine Work. Daily except Sat., 8-11, 1-5, and Sat., 8-11. Professor WELLS.

MECHANICS OF ENGINEERING

Course S 20 is the equivalent of M 5 of Sibley College, or C.E. 20 of the College of Civil Engineering. Prerequisite Integral Calculus.

Course S 21 is the equivalent of M 6 of Sibley College, or C.E. 21 of the College of Civil Engineering. Prerequisite Integral Calculus. S 22 includes strength of materials (that is, mechanics of materials). Prerequisite, the equivalent of Course S 21.

MUSIC

Students may be admitted to this department only upon special application in advance to Professor HOLLIS DANN. First year courses are designated A; second year, B; third year, C; fourth year, D; more advanced courses, E.

Sight Reading—A. Daily except Sat., 12:00. Miss BARTHOLOMEW.

Sight Reading—B. Daily exc. Sat., 9:15, 10:10, Mr. SCALES.

Sight Reading—C. University credit, one hour. Daily except Thurs. and Sat., 11:05 (two sections), Mr. SCALES and Professor HOERRNER.

Dictation—A. Daily except Sat., 9:15 (two sections), Miss WHITE and Miss BARTHOLOMEW.

Dictation—B. University credit, two hours. Daily except Sat., 9:15, Prof. HOERRNER; 10:10, Miss WHITE.

Dictation—C. Open to students who have completed Harmony B. University credit, two hours. Daily except Sat., 9:15. Miss WISENALL.

Materials and Methods—B. University credit, two hours. Daily except Sat., 11:05. Miss BRYANT.

Materials and Methods—C. Open to students who have completed Materials and Methods B. University credit, two hours. Daily except Sat., 10:10. Professor DANN.

High and Normal School Music—D. Open only to fourth year and more advanced students. University credit, two hours. Daily except Fri. and Sat., 12:00. Professor DANN.

Practice Teaching—C. Thurs., 11:05. Miss STONE.

Practice Teaching—D. Open to fourth year students only. University credit, one hour. Daily except Sat., 9:15. Miss BRYANT.

Rudiments of Music—A. Daily except Wed. and Sat., 2:15. Mr. SCALES.

Harmony—A. Admission to this course requires a working knowledge of rudiments of music. University credit, two hours. Daily except Sat., 10:10. Miss WISENALL.

Harmony—B. University credit, two hours. Daily except Sat., 12:00. Miss WISENALL.

Melody—C. University credit, two hours. Daily except Sat., 12:00. Mr. JOHNSTONE.

Melody—D. University credit, two hours. Mon., Wed., and Fri., 11:05. Mr. JOHNSTONE.

Advanced Chorus. Open to all B, C, and D students, and to A students who can qualify. Daily except Sat., 8:00. Professor DANN, Mr. BRAUN, accompanist.

Choral Conducting—D. Open to fourth year students only. Daily except Fri. and Sat., 10:10. Professor HOERRNER.

Orchestral Conducting—D. Open to C and D students only. Thurs. and Fri., 3:50. Mr. MATTERN.

School Orchestra B, C, or D. Mon. and Tues., 3:05. Mr. MATTERN.

Violin Classes. Hours to be arranged. Mr. MATTERN.

Community Orchestra. Wed., 7:30 p. m. Mr. MATTERN.

Orchestra, Material and Methods. Open to students taking the course for Supervisors of Instrumental Music. Hours to be arranged. Mr. MATTERN.

Song Interpretation. (To be taken with Rote Songs and Voice Training B or C.) Open to B, C, and D classes. Tues. and Fri., 2:15. Mr. JOHNSTONE.

Rote Songs and Voice Training—B or C. (To be taken with the course in Song Interpretation.) Mon. and Thurs., 2:15. Miss BRYANT.

Voice Training—D. Open to D and more advanced students only. Tues., Thur., 11:05, Fri., 12:00. Mrs. HUNT.

Principles and Practice of Teaching—D. A home-study course.

History of Music and Current Events—C. A home-study course.

History of Music and Current Events—D. A home-study course.

Musical Appreciation. Wed., 2:15. Mr. JOHNSTONE.

Orchestra and Band Technique. Elective. Open to advanced students who have completed Harmony D. Required only of students who are preparing to become Directors of Instrumental Music in the public schools. Daily exc. Sat.

Progressive Series of Piano Lessons (Elective)

I. Elementary Grade. University credit, two hours. Daily except Sat. Mr. KROEGER.

II. Intermediate Grade. University credit, two hours. Daily except Sat. Mr. KROEGER.

Completion of Course I is a prerequisite for entrance to Course II.

Normal Course in Piano Teaching. University credit, two hours. Daily except Sat., 3:05. Mr. KROEGER.

STATE COLLEGE OF AGRICULTURE

OFFICERS

Albert Russell Mann, A.M., Dean of the College of Agriculture and Director of the Experiment Station.
George Alan Works, M.S., Professor of Rural Education in charge of Summer Session in the College of Agriculture.
Cornelius Betten, Ph.D., Professor, Secretary, and Registrar.

STAFF OF INSTRUCTION

Susan Sipe Alburtis, J. O. Wilson Normal School, Washington, D. C.
W. P. Alexander, B.S., Assistant in Biology.
F. E. Andrews, Foreman of Instruction Flocks in Poultry Husbandry.
Elmer Eugene Barker, A.B., Ph.D., Assistant Professor of Plant Breeding.
Arthur Bishop Beaumont, A.B., Professor of Agronomy, Massachusetts College of Agriculture.
A. R. Bechtel, A.B., Instructor in Botany.
John Bentley, jr., B.S., M.F., Assistant Professor of Forest Engineering.
Irene Bricault, Director of Physical Training, Trumansburg, N. Y.
H. P. Buchan, Foreman Incubation and Brooding.
Mrs. Anna Botsford Comstock, B.S., Assistant Professor of Nature Study.
Ralph Wright Curtis, M.S.A., Professor of Landscape Art.
Alfred Emerson, B.S., Instructor in Nature Study.
R. J. Gilmore, Ph.D., Professor of Biology, Huron College.
Jeanne M. Gray, B.A., Director of Physical Education, New York State College for Teachers, Albany, N. Y.
L. A. Hausman, M.A., Instructor in Biology.
Arthur John Heinicke, Ph.D., Instructor in Pomology.
Laurence S. Hill, Director of Physical Training, Albany, N. Y.
Arthur Hollis, Student Assistant in Physical Education.
Caroline C. Johnson, Student Assistant in Physical Education.
Charles Kellert, Student Assistant in Physical Education.
C. H. Kennedy, B.S., Instructor in Entomology.
David Lumsden, Assistant Professor of Floriculture.
Edith H. Matzke, M.D., Lecturer on Hygiene, Cornell University.
C. L. Metcalf, A.M., Professor, Department of Entomology, University of Ohio.
Margaret Morrison, Student Assistant in Physical Education.
Loren Clifford Petrey, Ph.D., Syracuse University.
Harry E. Pratt, M.A., Principal Albany High School.
John M. Reed, Instructor in Athletics, Rensselaer Polytechnic Institute, Troy, N. Y.
Howard Wait Riley, M.E., Professor of Rural Engineering.
Lewis A. Roehl, Supervisor of Farm Shop Work.
Cora Smith, B.S., Teacher in Erie, Pennsylvania, High School.
William S. Taylor, M.S., Professor of Rural Education.
Clark Leonard Thayer, B.Sc., Instructor in Floriculture.
Edward Mowbray Tuttle, A.B., Assistant Professor of Rural Education.
Grace Waterman, Director of Physical Education, Emma Willard School, Troy, N. Y.
Karl McKay Wiegand, Ph.D., Professor of Botany.
Wilford Murry Wilson, M.D., Professor of Meteorology.

COURSES IN THE COLLEGE OF AGRICULTURE

BIOLOGY

S 1. General Biology. Credit, three hours. Lectures daily, except Sat., 11. Laboratory and field work, sec. A, M W F, 2-4.30; sec. B, T Th, 2-4.30, Sat., 8-10.30. Professor METCALF and Mr. HAUSMAN. Laboratory fee, \$2.50.

BOTANY

S 1. Elementary Botany. Credit, three hours. Lectures, M W, 8. Laboratory, M W, 9-1, F, 8-1. Assistant Professor PETREY and Mr. ———. Laboratory fee, \$3.50.

S 2. Elementary Morphology of Seed Plants. Credit, one hour. Lectures T, 2-3. Laboratory T, 3-5.30, Th, 2-4.30. Assistant Professor PETREY and Mr. ———. Laboratory fee, \$2.

S 4. Identification, Classification, and Ecology of the Higher Plants. Credit two hours. Prerequisite: some training in structural botany taken previously or in connection with this course. Lectures, Th, 8. Laboratory or field, T, 8-1, Th, 9-1. Professor WIEGAND and Mr. BECHTEL. Laboratory fee, \$2.50.

S 5. Trees and Shrubs. Credit, two hours. Prerequisite: some training in structural botany, taken previously or in conjunction with this course. Lectures W, 2. Laboratory or field work, M, 2-5, W, 3-5, F, 2-5. Mr. BECHTEL. Laboratory fee, \$2.50.

S 8. Identification and Classification of Lichens, Liverworts, Mosses, and Ferns. Credit, one hour. Prerequisite: a general knowledge of structural botany. Laboratory and field work, T Th, 2-5. Professor WIEGAND and assistants. Laboratory fee, \$2.

ENTOMOLOGY

S 4. Elementary Morphology of Insects. Credit, three hours. Laboratory open daily except Sat., 8-5; Sat., 8-1. Twenty-one hours of laboratory work a week required. Mr. YOUNG. Laboratory fee, \$2.

S 6. Elementary Systematic Entomology. Credit, two hours. Fifteen hours of laboratory work a week required. Must be preceded or accompanied by course S 4. Laboratory open daily except Sat., 8-5; Sat., 8-1. Mr. YOUNG. With course 4, required of all students who plan to do advanced work in entomology. Laboratory fee, \$3.

FLORICULTURE

S 1. Garden Flowers. Credit, one hour. Lectures, M W, 8. Laboratory, F, 2-4.30. Professor LUMSDEN and Mr. THAYER.

S 2. Indoor Flower Growing. Credit, one hour. Lectures, M W, 10; Laboratory, W, 2-4.30. Mr. THAYER.

S 3. Arrangement for Annuals and Herbaceous Perennials in the School Garden. Credit, one hour. Lectures, T Th, 10; Laboratory, M, 2-4.30. Professor LUMSDEN.

FORESTRY

S 1. Forests and Forestry. Credit, one hour. Lectures, T Th, 9. Forestry 122. Laboratory, F, 2-4.30. Assistant Professor BENTLEY.

HOME ECONOMICS

S 1. Elementary Course in Foods. Credit, four hours. Daily except Sat., 12. Laboratory practice daily except Sat., 8-11 or 2-5. Laboratory fee, \$10.

S 2. Advanced Course in Food Preparation. Credit, two hours. Laboratory practice daily except Sat., 8-11. Open only to students having had Course S 1 or its full equivalent. Laboratory fee, \$10.

S 3. Human Nutrition. Credit, three hours. Daily except Sat., 11. Laboratory practice, T Th, 2-5.30. Laboratory fee, \$7.50.

S 7. Elementary Clothing and Handwork. Credit, two hours. Practice daily except Sat., 8-10.30. Estimated expenses, from \$5 to \$10. Laboratory fee, \$2.

S 8. Draping, Drafting, and Elementary Dressmaking. Credit, two hours. Practice daily except Sat., 2-5. Prerequisite course S 7 or its equivalent. Estimated expense, \$8. Expense for dress form, \$4. Laboratory fee, \$3.

S 9. Dressmaking. Credit, two hours. Practice daily except Sat., 2-5. Prerequisite courses S 7 and S 8 or their equivalent. Estimated expense, from \$15 to \$20. Laboratory fee, \$2.

S 10. Elementary Millinery. Credit, two hours. Daily except Sat., 8-10.30. Estimated expense, from \$6 to \$8. Laboratory fee, \$2 to \$3.

S 11. Textiles. Credit, two hours. Prerequisite course, General Chemistry. Practice M W F, 10:30-1. Lecture, T Th, 10:30-11:30. Estimated expense \$5. Laboratory fee, \$2.

S 12. Survey Course in Clothing. Credit, two hours. Daily except Sat., 2-5. Estimated expense \$15 to \$20. Laboratory fee, \$2.

S 15. Home Economics in the Rural Schools. Credit, two hours. Lectures T Th, 8. Laboratory practice, M W F, 2-5.

LANDSCAPE ART

S 3. The Arrangement and Planting of Home and School Grounds. Credit, one hour. Lecture, F, 8. Laboratory, T Th, 2-4.30. Professor CURTIS.

METEOROLOGY

S 1. Meteorology and Climatology. Credit two hours. Lectures, M T Th, 10. Laboratory, W F, 2-4:30. Professor WILSON.

NATURE STUDY

- S 1. **General Nature Study.** Credit, two hours. Lectures M W F, 10. Field and laboratory observations, T Th, 10-12:30. Assistant Professor COMSTOCK.
- S 2. **Natural History of the Farm.** Credit, one hour. Lectures M, 8. Field work, sec. A, T Th, 2-5; sec. B, W F, 2-5. Mr. ALEXANDER. Laboratory fee, \$1.
- S 3. **Seminary in Kindergarten Methods in Nature Study.** M, 2. Intended primarily for those taking Course S 1. Assistant Professor COMSTOCK.
- S 4. **Advanced Nature Study.** Credit, one hour. Lecture, W, 12. Only those who have had course S 1 are eligible.
- S 5. **Garden Pests.** Credit, two hours. Lectures, T Th, 8. Laboratory and field work, M W F, 9-11.

PHYSICAL EDUCATION**Education**

- S 1. **Educational Psychology.** Credit, two hours. Daily, 8. Principal PRATT.
- S 2. **Philosophy of Physical Education.** Credit, one hour. T Th S, 10. Principal PRATT. This course furnishes the basis of Education S 4 and S 5.
- S 3. **Nature and Function of Play.** Credit, two hours. Daily, 9. Principal PRATT.
- S 4. **Principles of Physical Education.** Credit, two hours. Daily, 10. Mr. HILL.
- S 5. **Principles and Practice of Teaching Physical Training.** Credit, two hours. Daily, 8. Mr. HILL.
- S 6. **History and Systems of Physical Education.** Credit, one hour. M W F, 10. Assistant Professor GRAY.

Hygiene and School Inspection

- S 1. **Personal Hygiene.** Credit, two hours. Daily except Sat., 2. Dr. MATZKE.
- School Hygiene and School Inspection.**
- S 2. **Physical Diagnosis.** Credit, two hours. Daily except Sat., 9. Dr. MATZKE.
- S 3. **First Aid and Home Nursing.** Dr. GORDON.
- Physical Examinations and Personal Conferences.** Doctors MATZKE and GORDON.
- S 4. **Kinesiology.** Credit, two hours. Daily, 2. Assistant Professor GRAY.
- S 5. **Prescription of Exercise.** Credit, one hour. T Th S, 9. Miss WATERMAN.
- S 6. **Mechanotherapy.** Credit, one-half hour. T Th, 2. Miss WATERMAN.

English

- S 1. **Oral English.** Credit, one hour. M W F, 10. Principal PRATT.

Organization

- S 1. **Practical Conduct of Playgrounds, and Construction and Equipment.** Credit, one-half hour. T Th, 2. Mr. HILL.

Physiology

- S 1. **Physiology.** Credit, one hour. M W F, 10. Professor GILMORE.
- S 2. **Physiology.** Credit, three hours. Lectures, daily, 8. Laboratory, T Th S, 9-11. Professor GILMORE.
- S 3. **Physiology.** Credit, two hours. Lectures, daily, 2. Professor GILMORE.
- S 4. **Physiology of Exercise.** Credit, one hour. M W F, 9. Professor GILMORE.

Athletics

- S 1. **Theory and Practice of Group Athletics.** Credit, one hour. M W F, 9. Mr. HILL.
- S 2. **Theory and Practice of Field and Track Athletics.** Credit, two hours. Daily for men, 4-6. Credit, one hour. Daily for women, 4:30. Mr. REED and Miss BRICAULT.
- S 3. **Football.** Credit, one hour. Daily, 3.
- S 4. **Hockey and Tennis.** Credit, one hour. Alternating days, 4:30. Miss BRICAULT.
- S 5. **Soccer.** Credit, one hour. Daily, 4. Miss BRICAULT.
- S 7. **First Year Practice.** Credit, four hours. Daily, 11-1, 3-5.
- S 8. **Second Year Practice.** Credit, four hours. Daily, 11-1, 3-5.
- S 9. **Third Year Practice.** Credit, four hours. Daily, 11-1, 3-5.
- S 10. **Fourth Year Practice.** Credit, four hours. Daily, 11-1, 3-5.

Courses for Play Leaders and Directors

For those desiring to equip themselves as playground teachers and directors the following courses are suggested as essential: Education S 1; Education S 3; Organization S 1; Athletics: Theory and Practice of Group Athletics; Athletics: Theory and Practice of Field and Track Athletics; Activities: Games of low and high organizations, apparatus, rhythmic steps, folk dances, English country dancing, special features, organized games, and general practice work.

Special Courses. Special courses in the following subjects will be offered free of charge to advanced students registered in at least five hours work daily.

S 17. **Pageantry.** Daily, except Sat., hour to be arranged.

S 19. **Swimming.** Daily, except, Sat., hour to be arranged.

General Course

S 20. **Practical Course in Calisthenics and Recreation for the Teacher of the One-Room School.** Credit, one hour. Daily, except Sat., 8. Professor HILL.

PLANT BREEDING

S 1. **Principles and Practices of Plant Improvement.** Credit, two hours. Lectures M W F, 8. Laboratory and conferences W F, 2-4.30. Assistant Professor BARKER. Laboratory fee, 50 cents.

POMOLOGY

S 1. **General Fruit Growing.** Credit, three hours. Prerequisites Botany S 1 or its equivalent. Lectures and recitations daily at 11. Laboratory, M W, 2-4.30. Mr. HEINICKE.

S 2. **Advanced Pomology.** No credit toward graduation. Prerequisites: Botany S 1 and Pomology S 1, or the equivalent. Lectures T Th S, 9.

POULTRY HUSBANDRY

S 1. **The Care and Management of Poultry.** Credit, four hours. Lectures, daily, 9. Laboratory T Th F, 2-4.30. Laboratory fee, \$3.

S 2. **Farm Poultry.** Credit, one hour. Lectures, M W, 10. Laboratory Th, 2-4.30. Laboratory fee, \$1.

S 3. **Feeding Practice.** Credit, one hour. Must be accompanied by course S 1 or S 2. Practice for six weeks: morning 7:30-8:15; noon, 12:45-1:30; night, 4:30-5:00. Mr. ANDREWS. Laboratory fee, \$1.

S 3. **Incubating Practice.** Credit, one-half hour. Must be accompanied by course S 1 or S 2. Practice for three weeks: morning 7:30-8:15; noon 12:45-1:30; night, 4:30-5:00. Mr. BUCHAN. Laboratory fee, \$1.

S 4. **Brooding Practice.** Credit, one-half hour. Must be accompanied by course S 1 or S 2. Practice for three weeks: mornings 7:30-8:15; noon 12:45-1:30; night 4:30-5:00. Mr. BUCHAN. Laboratory fee, \$1.

RURAL EDUCATION

S 2. **Agriculture in the High School.** Credit, two or three hours. Lectures and discussions, daily, 9. Laboratory T Th, 2-4.30. Professor TAYLOR.

S 3. **Development of Agricultural Education.** Credit, one hour. Lectures M W F, 10. Professor TAYLOR.

S 4. **Administration and Supervision of Vocational Agriculture.** Credit, two hours. Lectures and discussions daily, except Saturday, 8. Professor WORKS.

S 5. **The School.** Credit, two hours, or lectures only, one hour. Lectures M W F, 9; repeated M W F, 11. Laboratory M W, 2:00-4:30; repeated T Th, 2:00-4:30. Assistant Professor TUTTLE and Miss SCHOFIELD.

S 6. **School and Home Gardens.** Credit, one hour. Lectures and discussions M, 11, F, 9. Practice period, M, 2-4:30. Mrs. SIPE ALBURTIS.

S 7. **Practice Teaching in School Gardening.** Credit, one hour. Hours by appointment. Mrs. SIPE ALBURTIS.

RURAL ENGINEERING

S 3. **Farm Mechanics.** Credit, two hours. Lectures, T Th, 11. Laboratory T Th, 2-4:30; S, 8-10:30. Professor RILEY. Laboratory fee, \$2.

S 4. **Woodwork for the Rural School.** Credit, one hour. T Th, 2-4:30; Sat., 8-10:30. Mr. ROEHL.

SCHOOL GARDENING

The College of Agriculture offers the following courses for persons who are interested in school gardening:

First Year, Vegetable Gardening S 1, Floriculture S 1, Soils S 3, Nature Study S 1, Rural Education S 6; **Second Year,** Vegetable Gardening S 2, Floriculture S 3, Nature Study S 5, Plant Breeding S 1, Rural Education S 7.

SOIL TECHNOLOGY

S 3. **Soils.** Credit, one hour. Lectures, W F, 11. Laboratory and demonstrations, T, 2-4:30. Professor BEAUMONT.

VEGETABLE GARDENING

S 1. **Vegetable Gardening.** Credit, two hours. Lectures, T Th F, 8, M W, 9. Laboratory, T Th, 9-12. Laboratory fee, \$2.

S 2. **Advanced Vegetable Gardening.** Credit, one hour. Prerequisite Course S 1. Lectures T Th, 9. Laboratory T, 2-4:30. Laboratory fee, \$1.50.

S 5. **Preservation of Perishable Crops.** Credit, three hours. Lectures daily, 12-1. Laboratory, M W Th, 2-4.30. Assistant Professor KIRKPATRICK. Laboratory fee, \$7.50.

THE FIFTIETH ANNUAL COMMENCEMENT

Wednesday, May 22, 1918

FIRST DEGREES

Bachelors of Arts

James Pierson Ackerman
Albert Stuart Angus
Anne Parker Arnold
Edith May Ausman
Norman Clark Babcock
Dorcas Janette Ball
Mary Warner Bancroft
Mary Eleanor Barstow
Joseph Adam Becker
Jerome Harold Beller
Frieda May Bernstein
Mildred Ruth Black
George Frederic Bock
Harold Elmer Bogart
Charles Dwight Boies
Howard Forest Bollinger
*Florence Boochever
Dorothy Temple Bowen
Alma Mary Bowman
Paul Bradford
Elizabeth Mary Brennan
Anthony Joseph Brown
Ruth Eleanor Brown
Maude Amelia Burdick
Adena Katherine Burt
Edwin John Carpenter, jr.
Louise Wheeler Case
Margaret Lyon Chapman
M. Arlouine Chesebrough
John Christensen
Dudley Crawford Cohen
Harry Collins
Margaret Geraldine Conlan
Florence Ethel Cook
Grace Henrietta Corleis
Nelson Warren Cornell
Katharine Coville
Myrl Cowdrick
Brodie Strachan Crump, B.S.
Marie Therese Genevieve Dickey
Ethel Violet Jackson Dikeman
Joanna Margaret Donlon
Neil Hill Dorrance
Holden Manchester Dougherty
Edward Harmon Eakle
Marguerite Warren Edwards
Katharine Finch
Louis Anthony Finegan
Joseph George Finklestein
Henry Franklin
Louis Freedman
Bertha Kathryn Frehse
Edwin Daniel Friderici
Madeline Fries
Arthur Frischman
Elizabeth Mills Fulton
Irene Mildred Gibson
Grace Melissa Gifford
Bessie Goldstein
Lemuel Caro Goldstein
Dorothy Elizabeth Griffith
Olive Grosklaus
Maria Louise Hagadorn

Sophie Harriett Harvith
Rosalind Heidenheim
Claus Ferdinand Heitmann
Frank Charles Henry, jr.
Evelyn Margaret Caroline Hieber
Richard Kucher Hoagland
Isabel Hopkins
Harriet Hosmer
James Mead Hyatt
Helena Juhar Jenanyan
Gwendolyn Hope Jones
Morris Kaplowitz
Charles Karsten
Harold Peter Kaulfuss
Frank Atkinson Kennedy
Gladys Dutton Kolb
Louise Lyman Lamphier
Lelia Hamilton Lassiter
Thomas Arthur Leffingwell
Joseph Levine
Frank Rosenzweig Levy
Mathilde Pauline Loeffler
Paul Walker Long
Arthur Laurence Loomis
George Loomis Loveridge
Margaret Whitney Luckings
Roy Oliver McDuffie
Robert Bush McGraw
Marguerite McKay
John Walter MacKellar
*Dorothy McSparran
Talbot Marion Malcolm
Anna Marsh
Archibald McIntyre Maxwell
Kingsley Darwin Maynard
Marion Frances Mellinger
Pierre Mertz
Garret Frederick Meyer
Eda Grace Miller
Adolph Miron
Robert Elbridge Moody
Jane Janetta Moore-Smith
Henry Gray Morris
Mary Elizabeth Morris
Olga Dorothea Moses
Paul Charles Murphy
Donald James Nightingale
Harry Nirenberg
Edwin Glenn Olds
Carroll Hepburn Owen
Benjamin Pepper
Ruth Edith Katherine Peterson
William Marion Pierce
Arthur Pierson
Mildred Potter
Alice Marie Quinlan
Abraham Nathaniel Richardson
†George William MacDonald Robertson
Josephine Mary Robertyna Rosenberg
Dominick Peter Rotunda
Henry Rubin
Dagmar Alfvén Schmidt
Anna Elizabeth Schnirel

*With Honors in English.

†With honors in the French Language and Literature.

Freida Helena Schoeffler
 Eva May Seeger
 Samson Abraham Seley
 Anna Regina Selkirk
 Isabel Ruth Senn
 Horace Stilwell Sirrine
 Winifred Skinner
 Robert Alfred Smith
 Walter Fox Smith
 George Alfred Spiegelberg
 Clifford Alfred Stanton
 Clara Covert Starrett
 Samuel Stein
 John Walter Stufft
 Anna Mary Swartz

Burton LeRoy Swartz
 Emilie Munroe Tallman
 *Jay R. Traver
 Katharina Marjorie Tressler
 Elbert Parr Tuttle
 Jessica Helen VanHorson
 William Perrine Van Wagenen
 Helen Louise Waters
 Harry Weaver
 George Fitch White
 Marion Langworthy White
 Ruth Williams
 Paul Truitt Willis
 Louise Dean Wilson
 William Dorr Wisner

Roswell Williams Woodworth

Bachelors of Chemistry

August Badanes
 George Henry Brandes
 Myron Wesley Colony
 Clarence Elphinstone Cormack
 Francis Kilian DuCassé
 Gustave Louis Freund
 Frank Victor Friedlander
 Harold Draper Kinney

Paul Harris Kramer
 Fannie Moses
 Melvin Nichols
 Israel Podrog
 David Schultz
 Arthur John Sherburne
 Julian Arell Sohon
 Paul Metcalfe Stouffer

Edward Tiffany Whiting

Bachelors of Laws

Henry Bick, jr.
 Charles Herman Bose
 Ralph Lewis Emmons, A.B.
 Jennie Martha Guthrie Foster
 William James Gilleran
 Victor La Rue Klee, A.B.

Carlos Lazo
 Alpheus Randolph Phelps
 Fred Schuyler Reese, jr.
 Olive Josephine Schmidt
 William Dudley Smith, A.B.
 Harvey Inkpen Tutchings

Max Mandel Yellen

Bachelors of Science

Sara Dukehart Abbott
 Reginald Holcomb Allen
 Elizabeth Alward
 Stanley Jewett Angell
 Sydney Siu-On Au
 Lucinda Monica Baker
 Jerrie Ostrander Banker
 James Jacob Barr
 Reba Lizzette Beard
 Julia Ernestine Becker
 John Henry Behrman
 Mary Catherine Blodgett
 Ernst Franz Bogdahn
 Charles Walton Bolgiano
 Harold Eugene Botsford
 Alice Vernetta Boyd
 Alice A. Boynton
 Camilla June Brown
 Franklin Edwin Brown
 Albert Stanley Burchard
 Raymond Bates Bush
 Wilbur Kingsley Butts
 Evie Lee Carpenter
 Dorothy Flood Choate
 John Griffith Clark
 Lester Marcus Cooper
 Hugh Lewis Cosline
 Dorothy Annie Cotton
 Perkins Coville
 Walter Cyril Crocco
 George Linton Dawson
 Clarence Sheldon Denton
 Norma DeVany
 John Peter Egbert
 Karl Nicholas Ehricke
 Leah English

Stephen Raymond Farley
 Max Feldbaum
 Mary Katherine Fennell
 Ray McAlpine Finch
 Daniel Carl Fisher
 Edgar Lincoln Forrester
 Helen Louise Gibbs
 Alexander Joseph Gilbert
 Charles Frank Gilman
 Esther Grimes
 Marcia Grimes
 Dudley Barnce Hagerman
 John Frederick Ham
 Girard Hammond
 William Abraham Harris
 Ruth Irene Hazen
 James Hopkins Healy
 Joseph Herr
 Fred Henry Heuer
 George Edward Hiebeler
 Mildred Frances Hills
 Isabelle Marguerite Hoag
 Arthur Lewis Hoffman
 Calista Jane Hoffman
 Beatrice Sarah Hollenbeck
 Frederick Hudes
 Ivalo Belle Hugg
 Wesley Yeomans Huntley
 Charles Ruthford Inglee
 Erwin Wheat Jenkins
 Miriam Catharine Jones
 Harold Joseph Karr
 Aaron George Katz
 Stacy George Kirtcher
 Joseph Brackin Kirkland
 Margaret Kniskern

*With Honors in Biology.

Roscoe Nelson Ladu
 Irma Lake
 Emily Lewis
 Marion Lavinia Lewis
 Oscar John Link
 John Carlson Loope
 Margaret Juanita Low
 Mary Florence Lumsden
 John Churchill Maddy
 Frank William Mar
 Irving Seely Middaugh
 George Rider Minier
 Edward Monahan, jr.
 Maxine Erminie Montgomery
 Roy Wallace Moore
 Ethel Mae Morris
 Homer Borst Neville
 Darwin Parker Norton
 Gerald Aldrich O'Brian
 Mark Owens
 Mable Rae Pashley
 George Eric Peabody
 Raymond Arnold Perry
 Juda Anna Phillips
 Gail Ferguson Puttick
 Sidney Raynarts
 Bertha Mae Reed
 Morris Lewis Reitzes
 John Alva Reynolds
 Robert Norton Reynolds
 Delia Althea Rightmire
 Ellis Howes Robison
 LeRoy Edward Rofe
 Bennett Eberhardt Rose

Esther Tibbitts Royce, B.S.
 Edith Myra Rulifson
 Louis David Samuels
 Roger Allen Sanford
 Anna Voorhees Schumann
 Louis Harold Schwarte
 Frances Elizabeth Willard Searles
 Marian Minerva Selden
 Howard Spencer Sisson
 James Wallace Smith
 Mabel Clara Spindler
 Karl Merner Staebler
 Herbert George Steffens
 Lillian Avis Stevens
 Glenn William Sutton
 Samuel Chadwick Sweeny
 Lyman Herbert Taft, jr.
 Fang-lan Tai
 Gustavo Antonio Tavares
 James David Tregurtha
 Ralph Chapman Van Horn
 Amy Elizabeth Van Wagenen
 Thomas Rowan Wagner
 Hollis Victor Warner
 Sidney Sardus Warner
 Leland Eugene Weaver
 Frederick Albert Weeks
 William Weinstein
 Frances Georgia West
 Rebecca Jane Worster
 Mildred Addison Youmans
 Robert Charles Younkheere
 Lorin William Zeltner
 Ella Dorothy Zurbrick

Doctors of Veterinary Medicine

Nathan Solomon Blackberg
 Don Arol Boardman
 Charles Elmer Brown
 Leon Dispeau Brunner
 Wright Abel Brunson
 Paul Tehan Ignatius Connolly
 Gaylord Keel Cooke
 Fred Cruickshanks
 Benjamin Finkelstein
 Joseph Michael Flannery
 Howard Fordham Fleming
 Edwin Jacob Frick
 Hyman William Gershovsky
 Walter Emmet Gilroy
 H. Paul Gray
 Harry Robert Greene
 Claude Delbert Grinnells
 Floyd Erwin Hoyt
 George E. Hunt
 Floyd Philip Hust
 Abram John Jackson, jr.
 DuBois Jenkins
 Francis Michael Kelley
 Edward William LaWare
 Harsey King Leonard

Louis Martin Lounsbery
 Benjamin Bristol Loveland
 John Leon McAuliff
 *Robert Ames McCartney, V.S., M.D.C.
 Miles Capron Markham
 Howard Eshelmen Martin
 Herbert John Metzger
 Clarence Merton Miller
 Harvey William Myers
 Abraham Packer
 *Wilburn Herrick Potter
 Solon Albert Richardson
 Dana Rolland Scutt
 William Henry Seabrook
 Fenner Carlton Smith
 Ralph Snow
 Walter C. Snyder
 Ellis Carlton Stafford
 Albert Jacob Tarr
 Lynn Howard Tripp
 Horatio Luther Van Volkenberg
 Owen Meredith Waller, jr.
 *Matthew Franklin Whitmore
 Harry P. Wynne
 Ansel Kenneth Zellner

Bachelors of Architecture

Kenneth Ford Coffin
 Edwin Philip Doerr
 William Gilmore French
 Julio Hernandez
 Charles Leon Levy

Harry Nicholas Maar
 Edwin Julius Truthan
 Stanley Mortimore Ward
 Herbert Rolland Weaver
 Lawrence Weiskopf

Sik Chung Yeung

Civil Engineers

Morris Barnes
 Rowland King Bennett
 Harry Bobker
 Henry Frost Chadeayne
 Alfred Stuart Collins
 Robert Curliss Edmunds

Frank Van Duzer Fields
 John Edward Fisher
 James William Fitzgerald
 Ernest Cleveland Fortier
 Joseph Goldstein
 William Milne Jones

*Conferred as of May 20, 1918. ●

Max Kurcias
 Chuan-heng Li
 Ross Edward MacGregor
 Ross Waldron McKinstry
 George Henderson Stanser McNair
 Salyg Nagler

Vidal Arceo Tan, B.A.
 Nicholas Arthur Walbran
 Carl Henry Walker
 Richard Weber
 Ludwig Weindling
 Andrew Jackson Whitney, 3d

Harry Wistrich

Mechanical Engineers

Selden Pierson Allis
 Frederick William Armbruster, jr., B.S. in M.E.
 Francis Aubert
 Roland Henry Bacon
 David Houser Banks, B.S.
 Leo Behr
 William Edward Blewett, jr.
 Wallace Hardison Collins
 Carl Spencer Couchman
 Lester Wells DuBois
 Edwin Lloyd Faris
 Mark Walter Farrell
 Donald Duncan Fitzgerald
 Henry Arthur Gaertner
 Paul Leslie Garver
 Harold Jennings Grow
 Carlos Elmer Harrington
 Willard Richardson Heald
 Earl Garrett Henderson
 Louis Herskowitz
 Phillip Synyer Hill
 William Rossiter Hinchman
 Frank Carey Holton, B.S. in M.E.
 Kwung Hsu
 Walter Lee Johnson, jr.

Chen Ku
 Herbert Rhoads Kuhns
 Cheng Chih Kuo
 Francisco Federico Lopez, A.B.
 Howard Archibald McDonell
 Cyrus W. Miller
 Harry Cordery Moore
 James Benedict Morey
 Francis John Nankivell
 Bertram Nirenberg
 Charles Raine Pettyjohn
 Franz Henry Reimer
 Hermenegildo Balbino Reyes, B.A.
 William Eber Robinson
 Frederick Le Roy Schaefer
 Walter Schmid
 Liang Hua Shen
 Min Kao Tang
 William Delmore Thompson
 William Felt Tufts
 Ernest Augustus Valade, B.S. in E.E.
 John William Weigt
 Vimont Carpenter Welch
 Howard Clark Whiston
 Harold Willson Williams

DOCTORS OF MEDICINE

(Conferred June 13, 1918, at the Twentieth Annual Commencement of the Medical College in New York City.)

Irvin Balenzweig
 John Vail Bissett, B.S.
 George Theron Blydenburgh, B.S.
 Jacob August Cantor, B.A.
 John Augustine Casey, B.A.
 Sidney Barnett Conger
 Lloyd Freeman Craver, A.B.
 Birdina Crosby, B.S.
 William Robert Delzell, A.B.
 Hartley Greaves Dewey, B.S.
 Walter Eber Divine
 Haynes Harold Fellows, A.B.
 Jacob Samson Goldberg, A.B.
 Samuel Chester Johnson, A.B.
 Arthur Myndert Kimberly, A.B.
 Lisle Byron Kingery, A.B.

Leila Charlton Knox, B.A.
 Leon Loewe, A.B.
 Michael Paul Lonergan, B.S.
 Merwin Elliot Marsland, A.B.
 Ralph Emerson Myers, A.B., A.M.
 Alfred Latimer Potter, A.B.
 Maurice Timothy Root, A.B.
 Morton Ryder, A.B.
 Samuel Schwadron, B.S.
 Abraham Morris Spindler, B.S.
 Jeannette Russell Stobo, A.B.
 Richard Yoder Thompson, A.B.
 Helen Isabel Walbridge, A.B.
 Walter Weller, A.B.
 Joseph Julius Wells, A.B.
 Edward Etsuya Yoshii

ADVANCED DEGREES

Doctors of Philosophy

Charles Paul Alexander, B.S.: The Biology and Phylogeny of Crane-Flies. Order Diptera.
 Ernst Friedrich Artschwager, B.S.: Histological Studies on the Potato Plant with special reference to the Leaf Roll Disease.
 Allan Cameron Fraser, B.S.: The Inheritance of the Weak Awn in Certain Avena Crosses and its Relation to Other Characters of the Oat Grain.
 Cora Louisa Friedline, A.B., A.M.: The Discrimination of Cutaneous Patterns Below the Two-Point Limen.
 Paul Frederick Gaehr, A.B., A.M.: The Specific Heat of Tungsten at Incandescent Temperatures.
 Josephine Mixer Gleason, A.B., A.M.: Feelings of Relation.
 Nelson William Hepburn, B.S., M.S.: A Modified Babcock Method for Determining Fat in Butter.
 Gustave Frederick Heuser, B.S., M.S. in Agr.: Growth and Development of the Domestic Fowl with Special Reference to the Male.

- William Garfield Mallory, A.B., A.M.: The Distribution of Energy in the Spectrum of Erbium Oxide.
 DeVoe Meade, B.S.: A Study of Inheritance in Guinea-Pigs.
 Nemesio Blanco Mendiola, B.S., M.S.: Variation and Selection Within Clonal Lines of *Lemna Minor*.
 Edward Gardner Misner, B.S.: An Economic Study of Dairying on 149 Farms in Broome County, New York.
 Waro Nakahara, B.S., A.M.: Studies of Amitosis: Its Physiological Relations in the Adipose Cells of Insects, and its Probable Significance.
 Mark Embury Penney, A.B., S.T.B.: The Principle of Self-Consciousness in Modern Philosophy as a Basis of Educational Theory.
 Franklin William Pettey, B.A.: The Biology of the Codling Moth and its Control in the Western Part of Cape Province, South Africa.
 Chih Ping, B.S.: The Biology of *Ephydra subopaca* Loew.
 Robert Mifflin Snyder, B.S.: The Physical Action of Lime on Clay Soils.
 Walter August Verwiebe, A.B.: The Devono-Carboniferous Boundary Rocks of Ohio, Pennsylvania and New York.
 Paul Thomas Young, A.B., A.M.: An Experimental Study of Mixed Feelings.

Masters of Arts

- Gerhard Baerg, A.B.: Das Märchendrama in der neueren deutschen Literatur.
 Hyman Chonon Berkowitz, A.B.: Echegaray. His Life and Dramatic Works.
 Marion Elizabeth Blake, B.A.: The Reliefs of the Arch of Constantine.
 Estle Clarence Carson, A.B.: Trade Relations Between the United States and the West Indies, 1775-1793.
 Katherine Emily Cockcroft, A.B.: Roman Emperors and the Praetorian Guard.
 Clara Whitney Crane, A.B.: Some Points of Comparison in Dante and Milton.
 Percy Austin Fraleigh, A.B.: On Some Generalizations of the Silverman-Toeplitz Theorem. •
 Henry Wolfe Greenberg, A.B.: Quantity and Quality of the Latin Vowels in the Classical Period.
 Ina Winning Hall, A.B.: Shakespeare and Music.
 Margaret Kincaid, A.B.: F. M. Urban: *Die Praxis Der Konstanzmethode*. Translation and Mathematical Commentary.
 Joseph Levine, A.B.: James Russell Lowell and the Transcendental Movement in New England.
 Elma G. Martin, B.Ph.: Rousseau's Religious Ideas with Reference to the Religious Ideas Prominent in the Revolution and to their Influence on Robespierre and Saint Just.
 Julia Moesal, A.B.: A Study of the Caudata of the Cayuga Lake Basin.
 Vidal Arceo Tan, B.A.: Transformation of Curves by Homology.
 Miriam Hasbrouck Van Dyck, A.B.: America in Modern German Fiction.
 Harry Elias Vick, B.S., M.S.: A Practical Method for Determining the Amount of Carbon Dioxide Liberated by Aquatic Animals with Special Reference to Fish.
 Geraldine Margaret Willis, A.B.: Troubadour 'Joi' in Modern Poets.

Masters of Science

- Ralph Waldo Emerson Cowan, B.S.: Camembert Cheese.
 Walter Ohlendorf, B.S.: The Biology of the Bean Aphis. (*Aphis rumicis* Linn.)

Masters of Science in Agriculture

- Chih Lan Chien, B.S.: A Study of Mendelian Inheritance in Radishes. *Raphanus sativus* L.
 Archie Byron Dann, B.S.: A Study of Coefficients of Digestion as Adapted for Use in Computing Rations for Poultry.
 George Haines, B.S.: Studies in the Food and Water Consumption and Manure Production in the Horse.
 Howard Campbell Jackson, B.S.: Factors Affecting the Babcock Milk Fat Test.

Masters in Forestry

- Mabel Gertrude Beckley Millen, B.S.: A Study of Forest Tree Seeds with Special Reference to White Pine (*Pinus Strobus* Linn).
 Louis Arthur Zimm, B.S.: A Wilt Disease of Maples Caused by *Verticillium* sp.

Master of Architecture

- Rosamond Wolcott, B.Arch.: A Music Garden.

Master of Civil Engineering

- Eric Vail Howell, C.E.: An Investigation of the Flow of Water Through Submerged Orifices and Tubes.

CONFERRED JANUARY 26, 1918

FIRST DEGREES

Bachelors of Arts

Jacob Augenblick
 Bernard Frank Burgunder
 Elsie Sterling Church
 Katharine Emily Cockcroft
 Marguerite Craig Flockhart

Adela Overton Girdner
 Ina Winning Hall
 Leo Paul Larkin
 Walter Francis Phelan
 Bernardine Veronica Schelder
 Thomas Ford Stacy

Bachelors of Chemistry

William Leroy Lippincott

Harry Matakonsky

Bachelors of Science

Benjamin Aborn, 2d.
 Helen Houghton Bennett
 Henry Negus Boucher
 Hiram Ray Burritt
 William Van Ness Carver
 Philip Cohn
 Kenneth Sydney Covey
 Walter Earle Curtis
 Morris Davidow
 George Turner Dibble
 Lucy Angela Driscoll
 Alfred Edwards Emerson
 Katharine Etz
 J. Leo Finneran
 Angel Gabeff
 William Alexander Gage
 Joseph Samuel Leo Gavin
 Alexander Morris Gershoy
 Paulino Joseph Gonzalez
 Christine Mary Goodwin
 Dorothy Millen Gray

Mary Duddy Hevey
 Juan Resurreccion Iberico
 Alfred Bartholomew Francis Kelly
 Emile Kostal
 Frederick Kraus
 Donald Edwin Maclay
 Ludwig Stolz Mayer
 Isaac Brown Mitchell
 Hubert Hill Moon
 William Harley Myers
 Solomon Pomeranz
 Emily Sweetland Reed
 Katharine Marie Rodger
 Lewis Julian Silvers
 Frazer Vautin Sinclair
 Elmer Herbert Smith
 Leland Spencer
 Gurdon Bull Stevens
 John Sturrock
 Harold Long Weinstein
 Nelson Miller Wells

Doctors of Veterinary Medicine

William Arthur Billings

Edward Stanley Stone
 Marshal Fiske Wilkinson

Civil Engineers

Herman Berman
 Juan Manuel Bertran
 Aram Houssig Dimijian
 Daniel Tompkins Duncan

Sigmund Baach Lindau
 Feng-Shu Lu
 Carl August Maxeiner
 Alfred Mullikin

Mechanical Engineers

George Hubert Bollman
 *Walter Brenton
 *George Emmes Cassidy

Hugo N. Diederichs
 †Thomas Ralph Jones
 *John Harold Vickers
 George Austin Worn

*As of June 21, 1917.

†As of September 26, 1917.

CONFERRED JANUARY 26, 1918

ADVANCED DEGREES

Doctors of Philosophy

Wallace Larkin Chandler, B.S., M.S.: The Physiological Action of Nitrobenzene Vapor on Animals.
 George Irving Dale, A.B.: The Moors in the Spanish Drama of the Golden Age.
 Joseph Peter Koller, B.Chem.: The Preparation of Selenic Acid and Some of its Compounds.
 Ernest Walter Lindstrom, A.B.: Chlorophyll Inheritance in Maize.
 Benjamin Dunbar Wilson, B.S., M.S.: The Translocation of Calcium in a Soil.

Masters of Arts

Creig Simmons Hoyt, B.S.: The Zinc Mercuric Sulfocyanate Method for the Determination of Zinc.
 Richard Alan Mordoff, B.S.: The Influence of Large Bodies of Water on the Temperatures of the Surrounding Country.

Masters of Science in Agriculture

Richard Thomas Cotton, B.S.: A Preliminary Study of the Fauna of *Plantago Major Linnaeus*.
 Gordon Peter McRostie, B.S.A.: Inheritance of the Hulled Character as Shown by Crosses Between *Avena sativa* and *Avena nuda*.
 Lua Alice Minns, B.S.: A Study of the Primulas Grown Under Glass in America.
 Gilbert Warren Peck, B.S.: The Prices of Apples and Pears on the New York City Market from 1853 to 1917.
 George Stewart, B.S.: A Study on Varietal Nomenclature as Applied to Cultivated Oats (*Avena sativa*).
 Emil Conrad Volz, B.S.: Studies on the Keeping Qualities of Cut Flowers.
 Chun Wong, B.S.: Orchidaceæ. The Monographic Studies with and Culture of Terrestrial and Epiphytic Orchids.
 Albert Abraham Kraus, B.S.: A Study of Red Pine with Reference to its Suitability for Reforestation in Tompkins County, New York.

DEGREE CONFERRED AS OF SEPTEMBER 26, 1917

Mechanical Engineers

Spencer Albert Covell, B.Sc.

DEGREES CONFERRED AS OF MAY 22, 1918

Bachelor of Arts

Guy Carleton Bayley Dolson

Mechanical Engineers

Crawford Cook Halsey

Carlos Child Knox
 Robert Edgar Bussey

DEGREE CONFERRED SEPTEMBER 23, 1918

Doctor of Veterinary Medicine

Robert Wesley Fuller

DEGREES CONFERRED OCTOBER 9, 1918

FIRST DEGREES

Bachelors of Arts

Louise Clift Bentley
 Meyer Bodansky
 Leola Marvin Diehl
 Clifford Morton Gould
 Albert Clarence Graeser

Cora Jane Gratrix, Pd.B.
 Jack Albert Guggenheim
 Lester Hand Jayne
 Charles George Muller
 Isaac Nachmani

Sawyer Thompson

Bachelor of Chemistry

Ralph Thomas Kline Cornwell

Bachelors of Science

Dorothy Ashley
 Rudolph Joseph Babor
 Edwin Goodrich Batsford
 Samuel Blum
 Henry White Cleeves
 Ruth Lucinda Dodge
 Philip Douglas Flanner
 Donald McKinstry Gray

Grace Hall Griswold
 John Knapp Herrick
 Edward Blaine Hewes
 Samuel Hochman
 Henry George Schmidt
 Mildred Margaret Stevens
 Joseph Teck
 John George Wolf

Bachelor of Architecture

Gosta William Hagstrom

Civil Engineers

Iu Choo Chan, B.S.

Philip Lawrence Sullivan
 Percy Suydam Wilson

Mechanical Engineer

Harry Handwerger

ADVANCED DEGREES**Doctors of Philosophy**

Arthur Bishop Beaumont, B.S.: Studies in the Reversibility of the Colloidal Conditions of Soils.
 Peter Walter Claassen, A.B., A.M.: Insect Inhabitants of Typha; their Ecological Relations.
 Herbert Barker Hungerford, B.A.: The Biology and Ecology of Aquatic and Semiaquatic Hemiptera.
 James Owen Knauss, B.A., A.M.: Social Conditions among the Pennsylvania Germans in the Eighteenth Century as Revealed in the German Newspapers Published in America.
 William Irving Myers, B.S.: An Economic Study of Farm Layout.
 Alice Ayr Noyes, B.A., A.M.: The Ecology of the Hydropsychidæ and Philopotamidæ of Rapid Streams.
 Howard A. Pidgeon, B.Sc., M.Sc.: Magneto-Striction with Special Reference to Pure Cobalt. Part 1:—The Wiedemann Effect.
 Raymond Stratton Smith, B.S., M.S.: Some Effects of Potassium Salts on Soils.
 Donald Kiteley Tressler, A.B.: The Solubility of the Soil Potash in Various Salt Solutions.

Masters of Arts

Cheh Yao Chang, B.Sc.: Chemical Studies on Some Common Chinese Medicinal Herbs.
 Vi Arvin Graham, A.B.: Hegel's Theory of Development.
 Harry Lebowsky, B.S.: Relation of Orchid Endophyte to Development of Orchid Seed.
 William Curtis Swabey, A.B.: An Essay on Malebranche.

Master of Science

Theresa Elizabeth Schindler, B.A.: The Antirrhinum—Botany, History, Varieties, Culture.

Master of Science in Agriculture

Eugene Curtis Auchter, B.S.: The Fruiting Habit of the Apple Tree.

Masters of Civil Engineering

Hsieh Chun Chiu, B.S. in C.E.: A Critical Comparison of Methods for Finding Stresses in a Swing Truss.
 Chia Chi Huang, B.S. in C.E.: On Influence Lines for Deflections of Beams.

DEGREE CONFERRED AS OF OCTOBER 11, 1916**Civil Engineer**

James Joseph Wall, jr.

DEGREE CONFERRED AS OF MAY 22, 1918**Bachelor of Chemistry**

Harrison Porter Hood

DEGREES CONFERRED DECEMBER 20, 1918

FIRST DEGREES

Bachelors of Arts

Che Kwei Chen
Yen Shuen Chow
Adelaide Helen Cook Daly
Joseph Goldberg
Alethe Alida Holsapple

Ralph Alexander Liddle
Mitchell Stokes Lurio
Dean Crawford Moore
William Schack
Max Judd Wasserman
Jacob Wilson

Bachelors of Science

Helen Elise Bullard
Daniel John Carey
Fordyce Charles Deitz
Cornelia Dockstader Fonda
Samuel Goldberg
Meyer Goldman
Henry Eugene Hartman
Richard Lieke

Frederick William Loede, jr.
Lillian Antoinette Lybolt
George Henry Russell
Vernon Gulick Sandford
Luis Serrano
George D'Esterre Spencer
Francis Omar Underwood
Carll Preston Winn
Grace Wright

Bachelor of Architecture

Yen Chih Lu

Civil Engineers

George Percival Bullard
Adolph Omega Infanger
Claude M. Pendleton

Yu-fong Philander Sun
John Thomas Tavares
Mariano Alfredo Valderrama

Mechanical Engineers

William Harry Blew
Arthur Bruce Boehm
Lester Pultz Burt
William Holbrook Cleminshaw, jr.
Anthony Henry Collins
Charles William Dietrich, jr.
Earl Radford Evans
Howard Mortimer Evarts
Laurence Vivian Farnham
Donald Fisher
Charles Francis Hendrie
William Klemm Henigbaum
Thomas Bunting Huestis
Shurly Russell Irish
Henry Jacob Kaltenthaler, jr.
Hon-Kwong Kwaan
Walter Henry Lawrence
Edwin Albert Leibman
Eugene Alfred Leinroth
Laurence Edward Luce
Frank Williams McDonell
Kneeland Abram Mereness
Charles Marion Miller
Wayne Downing Miller
George Talmage Minasian
Ralph Neuhaus
Burdette Kibbe Northrop

Charles Erastus Norton
Cuyler Shaw Patton
Willard Chase Peare
Godfrey Ruhland Rebmann, jr.
George Rees
Weston Roger Reese
Lewis Minter Reynolds
Emory Clark Rice
Harvey Emmett Roberts
Everett John Rutan
Thomas James Ryan
Archer Maddy Sampson
August Schmidt, jr.
Carl Stephen Seibold
Soloman Seidman
George Silva
Robert Gates Skinner
Robert Duroy Spear
John Lane Sprague
Thomas Ford Stacy, A.B.
George Stone
Fred William Sultan, jr.
Clinton Russell Tobey
Herman Benoit Waag
Edgar Raymond Watt
Marvin Woodley Wickham
Sumner Bisbee Wright

PRIZES

The following were awarded by the Faculties during the academic year 1917-1918:

The Sibley Prizes in Mechanic Arts:

First Prize	H. B. Reyes
Second Prize	S. B. Wright
Third Prize	F. C. Evans
Fourth Prize	E. C. Rice
Fifth Prize	H. K. Kavasn

The Horace K. White Prizes (Veterinary College):

First Prize	G. K. Cooke
Second Prize	F. C. Cruickshanks

The Woodford Prize in Oratory

Chen Ku

The Eighty-six Memorial Prize in Declamation

Horace Ellsworth Shackleton

The Ninety-four Memorial Prize in Debate

Daniel Thomas Gilmartin, Jr.

The Guilford Essay Prize

William Schack

The Corson Browning Prize

Livingston Blauvelt

The Hollingworth Honorarium of Research (Veterinary College):

Benjamin Finkelstein

Medals of the Société des Architectes Diplômés par le Gouvernement français.

First Medal	Not awarded
Second Medal	Not awarded

The Clifton Beckwith Brown Memorial Medals in Architecture:

First Medal	Not awarded
Second Medal	Edwin Julius Truthan

The John Metcalfe Polk Memorial Prizes:

First Prize	Morton Ryder
Second Prize	Leon Loewe
Third Prize	Merwin Elliot Marsland

The Whiting Otology Prizes:

First Prize	Morton Ryder
Second Prize	Jacob Samson Goldberg

The Charles Goodwin Sands Memorial Medals:

First Medal	Roy W. Cheeseman
Second Medal	Roy W. Cheeseman
	L. V. Lacy
	Edwin Julius Truthan
	Rosamond Wolcott

The American Institute of Architects Scholarship Medal

Edwin Julius Truthan

The Fuertes Medals: (Civil Engineering College):

Graduate	Ross Milton Riegel
Undergraduate	Morris Hilton Barnes

The Eastman Prizes for Public Speaking:

First Prize	Frank LeRoy Manning
Second Prize	Harold Eugene Botsford

The Frances Sampson Fine Arts Prize

E. L. Howard

Jane Miller Prize, Veterinary Physiology

H. E. Marsh
Joseph Bienenstock

The Fuertes Memorial Prizes in Public Speaking:

First Prize	Chen Ku
Second Prize	Vidal A. Tan
Third Prize	George H. S. McNair

The Corson French Prize

George William MacDonald Robertson

The Stewart Prizes: (Agricultural College)

First Prize	P. A. Hopkins
Second Prize	R. A. Perry
Third Prize	A. A. Whitehill
Fourth Prize	F. E. Wheeler

The George Chapman Caldwell Prize in Chemistry

Melvin S. Nichols

J. T. Morrison Prize

Edith Dudley Horton

The Barnes Shakespeare Prize

Eva May Seeger

The J. G. White Prizes in Spanish:

First Prize, Group One	Not awarded
Second Prize, Group Two	Jacob Wilson
Third Prize, Group Three	George Silva

Messenger Prize

Not awarded

Charles Lee Crandall Prizes:

First Prize	Not awarded
Second Prize	Frank VanDusen Fields

Sherman-Bennett Prize

Not awarded

Goethe Prize

Not awarded

STUDENTS, DECEMBER 1, 1918

Abbreviations. The colleges are designated in the list of students as follows: Arts and Sciences, A; Agriculture, Ag; Architecture, Ar; Civil Engineering, C; Law, L; Mechanical Engineering, M; Medical, M.D.; Veterinary, V. Graduate Students are indicated by Grad; Special Students by Sp. The number, e. g. "1919," "1920," etc., indicates the year of expected graduation.

†Indicates a member of the Students' Army Training Corps.

†Abrahams, Jacob	1920 A (Chem)	Brooklyn
†Abrahams, Simon Meyer	1920 Ag	Brooklyn
†Acker, Leonard	1919 A	Poughkeepsie
†Ackerknecht, Edwin William	1922 A (Chem)	Johnstown
†Ackerly, Charles Edwin	1920 A	Cuba
†Ackerly, Robert Saunders	1922 A	Cuba
Ackerman, Claude Eldyn	1922 A	Belmont
Ackerman, Harold Louis	1922 A	Belmont
Acomb, Helen McCurdy	1920 Ag	Dansville
Adams, Alfred Eugene	1923 M	Ridgewood, N. J.
Adams, Flora, B.A.	1920 M.D. (N. Y. C.)	Hackensack, N. J.
Adams, Harold Biscoe	1920 M.D. (N. Y. C.)	New York City
†Adams, James Richard	1921 A (Chem)	Utica
†Adams, John Davry	1921 M	North Troy
Adams, Katharine Rogers, B.A.	Grad	Poughkeepsie
†Adams, Mortimer Clinton	1922 Ag	Barnard
†Adams, Ralph Roy	1922 A (Chem)	Salamanca
Adamson, Wallace Marshall	1922 C	Hasbrouck Heights, N. J.
Addoms, Helen Elizabeth	1919 A	Tuckahoe
†Adelman, Arthur	1920 A	Brooklyn
†Adelmann, Howard Bernhardt	1920 A	Buffalo
†Adelsberg, Hyman	1921 A	Brooklyn
†Aderer, Edwin	1921 A	New York City
Adler, Erna	1920 A	New York City
†Adler, Leo	1922 M	New York City
†Adler, Milton	1920 Ag	Brooklyn
Adler, Samuel	1922 Ag	Port Chester
Aeschbach, Mildred Wilhelmina	1922 A	Hoboken, N. J.
†Airey, Edward Grant	1922 A (Chem)	Buffalo
Airey, Esther	1920 A	Buffalo
Alberding, Charles Howard	1923 M	Clayville
†Albin, Archer Overton	1922 M	Lynbrook
Albright, Marian Ruth	1919 A	Canandaigua
Aldrich, Mildred Lois	1921 Ag	Castile
Aldrich, Ruth Imel	1920 A	Fredonia
†Alexander, J. Harry, jr.	1921 M	Brooklyn
Allen, Charles Loring, A.B.	Grad	Brodhead
Allen, Charlotte Wintringham	1922 A	Millbrook
Allen, Fern Litchard	1920 A	Hornell
Allen, Howard Bushnell, B.S.	Grad	Ithaca
†Allen, Howard George	1920 M	Albion
†Allen, Loren Archie	1922 M	Canton
Allen, Ruth Ellen	1922 L	Dayton, Ohio
†Allen, William Aruthur	1922 A	New Cumberland, W. Va.
†Allenberg, Bertram	1922 A	New York City
Allis, Ethel Elizabeth	1919 Ag	Ithaca
†Altman, Benjamin	1921 A	Brooklyn
Altschuler, William	1922 M	New York City
Amereich, Louis Saul	1922 C	Brooklyn
†Anderson, Duncan Ross	1922 M	Rome
†Anderson, Herbert Charles	1921 M	Chicago, Ill.
Anderson, Juliette Norma, B.S.	Grad	Portland, Ore.
†Anderson, Raymond Terhune	1920 A	Shreveport, La.
†Anderson, Ross Stockbridge	1922 C	Chevy Chase, Md.
Anderson, Robert William	1922 M	Brooklyn
†Anderton, Charles Edward, jr.	1922 M	Milwaukee, Wis.
André, Paul Carl	1922 A (Chem)	Buffalo
†Andrew, Earl Raymond	1921 C	Danbury, Conn.
Andrews, Hazel Marian	1921 Ag	Newark Valley
†Andrews, Henry Vincent	1921 A	Lyons
Andrews, Lale Clark	1922 M	Kansas City, Mo.
†Andrews, Norwood Henry	1922 Ag	Moorestown, N. J.
Andrews, Sophie Townsend, A.B., A.M.	1919 M.D. (N. Y. C.)	New York City
Anthony, Helen Gladys	1922 A	Greenwich
Antonelli, Peter	1919 M	Chicago, Ill.
Apfel, Amy Ruth	1919 A	Brooklyn
†Apgar, William Burnett	1921 Ag	Madison, N. J.

Archibald, Jane Isabelle	1921 A	Bovina Center
Arishima, Yukio Michi	1922 M	New York City
†Armstrong, James Blanchard	1922 M	Schenectady
†Arnold, Harold Sibley	1923 M	Monroe
Aronowitz, Max Bernard, A.B.	1921 M.D. (N. Y. C.)	New York City
Arosemena, Pablo Constantino	1919 Ag	Panama, Panama Republic
Arronet, Margaret George	1921 C	Petrograd, Russia
Artigas, Antonio Jose	1922 M	Mexico City, Mexico
†Ashby, Franklin Antrim	1922 M	Tulsa, Okla.
†Ashley, Carlyle Martin	1922 M	Washington, D. C.
†Atkinson, Jerome Thomas	1921 A (Chem)	Bayside
†Atkinson, Neil	1922 A	Bayside
Atkinson, Ruth Voorhees	1920 A	Ithaca
Atterbury, Ruth Rand, M. A.	Grad M.D. (N. Y. C.)	Brooklyn
Auer, Johannes Abraham Christoffel Fagginger, B.D.	Grad	Ithaca
Ausman, Mildred Katharine	1922 A	Herkimer
†Austen, Robert Norman	1923 M	Etna, Pa.
Avant, Louise Roberta	1919 A 1922 M.D.	New York City
Avery, Ralph Chase	1923 M	Broadalbin
†Ayars, David Preston, jr.	1920 M	Wilkes-Barre, Pa.
†Ayers, Sidney Elliot	1922 A	Penn Yan
Babcock, Eveline Noble	1922 A	Lockport
†Babcock, Juan Acres, jr.	1922 M	Plainfield, N. J.
Babor, Rudolph J., B.S.	Crad	New York City
Bache-Wiig, Sara, A.B.	Grad	Portland, Me.
†Backus, Charles William	1921 L	New Berlin
Bacon, Charlotte Trotter	1922 Ag	Canandaigua
Badger, Katharine	1921 A	Ithaca
†Baer, Walter Arthur	1920 M	Paterson, N. J.
†Baer, Walter David	1920 M	Pittsburgh, Pa.
†Bahan, Walter James	1922 M	Fort Worth, Tex.
Bailey, Dixon Lloyd, B.A.	Grad	Winchester, Ont., Canada
Bailor, Winifred Georgie	1920 Ag	Brookton
†Baker, Arthur Sidney	1922 A	New York City
Baker, Barton	1922 L	Webster
†Baker, Edward Vreeland	1922 M	Willsboro
Baker, Helen Dorothy	1921 Ag	Ithaca
Baker, Louise Eugenie	1919 A	Ithaca
Baker, William Howard	1923 M	Hallsboro, Va.
Bakunovitz, Nicholas	1922 A (Chem)	Brooklyn
Balcom, Ruth Marion	1921 A	Rockville Center
†Baldauf, Augustus Franklin	1922 A	Buffalo
†Baldelli, Zeno Hugo	1920 Ag	Corona
Baldwin, Andrew Grey	1921 Ag	Brooklyn
Baldwin, Frank Cecil	1922 Ag	Bristol, Pa.
Baldwin, Horace Strow, B. S.	1921 M.D. (N. Y. C.)	Orange, N. J.
†Baldwin, Jay Austin	1922 A (Chem)	Mansfield, Pa.
†Baldwin, Whitford Anderson	1923 M	Oak Park, Ill.
†Ball, Robert Mueller	1922 A (Chem)	Detroit, Mich.
Ballou, Charles Augustus	1921 Ag	Brooklyn
†Ballou, Harold	1921 A	Jersey City, N. J.
†Ballou, Hosea Cushman	1920 A	New York City
Bancroft, Hester	1922 Ar	Ithaca
†Bandler, Joseph	1922 A (Chem)	Newark, N. J.
†Bangs, John Robert, jr.	1920 M	Baltimore, Md.
Banks, Josephine	1919 A	Ithaca
Banner, Erford Lynn, B.S., M.S.	Grad	Bainbridge
†Banse, Herbert George	1921 Ar	Chicago, Ill.
Banta, Theodore Charles	1922 M	Ridgewood, N. J.
†Barasch, William	1921 M	New York City
Barbour, Lemont	1920 A	New York City
†Barkdull, Roy Edgar	1921 M	New Orleans, La.
†Barkelaw, Charles Smith, jr.	1922 M	Dayton, Ohio
†Barker, Charles Frederick	1923 M	Coopers Plains
†Barker, Clifford Van Keuren	1922 C	Staatsburg
†Barker, Frederick George, jr.	1923 M	Cleveland, Ohio
†Barnard, Charles Henry	1922 Ag	Utica
†Barnes, Benjamin deSaussieur	1922 Ag	Ridgewood, N. J.
†Barnes, George Francis	1922 A	Jersey City, N. J.
†Barnes, Harry Wilbur	1921 C	Detroit, Mich.
†Barney, Ellery Robert	1922 Ag	Milford
†Barney, Malcolm Letchworth	1922 A	Buffalo
†Barrett, Earle Walton	1923 M	Corning
Barrett, Irma Frances	1921 A	Troy
†Barrett, Sidney Hall, jr.	1922 A	Richmond Hill
†Barrett, Willard Riehlman	1920 A (Chem)	LaFayette
Barrett, Winnie Mae	1920 Ag	Binghamton
Barringer, Edna Bell	1922 A	Tulsa, Okla.
†Barris, Henry Allen	1922 M	Silver Creek
Barros-Barreto, Benjamin Franklin	1922 C	Pernambuco, Brazil, S. A.

Barros-Hurtado, Guillermo	1919 Ag	Santiago, Chile
Barrow, Winston Ewart	1922 A	Brooklyn
Barstow, Mary Eleanor, A.B.	Grad	New York City
Barten, Edward Aloysius	1922 M	Philadelphia, Pa.
Barthel, Else Anna Sophie, B.S.	1920 M.D. (N. Y. C.)	New York City
†Bartlett, Leon Edward	1922 A	Galeton, Pa.
Bartlett, Willard John	1920 A (Chem)	Galeton, Pa.
†Bartoli, Joseph Faraci	1921 A	New York City
†Barton, John Allen	1921 C	Belton, Tex.
†Bartsch, Edward Holmes	1922 A	Jersey City, N. J.
Bashore, Nelda Beatrice	1922 A	New Rochelle
†Bassett, Charles Fernando	1923 Ar	Castile
Bassett, Madeline Frances	1919 A	Coatesville, Pa.
†Bassett, Samuel Hopkins	1920 A	Colemans Station
Bateman, Helen Marion	1921 A	Champlain
Bateman, Margaret Louise	1919 A	Champlain
Bauer, George Frederic	1922 M	Elkins Park, Pa.
†Baugher, Irving Bosley	1921 A	Baltimore, Md.
Baum, Seymour Leopold	1922 M	New York City
†Baumgardner, Donald George	1923 M	Demster
†Baur, Oscar, jr.	1922 M	Chicago, Ill.
†Baxter, Edmund Francis	1922 A	Waverly
†Baxter, Portus	1922 M	Libby, Mont.
Bayard, Frances Martin	1920 M	Philadelphia, Pa.
†Beach, Earl Frederick	1923 C	Ransomville
†Beach, Stafford Bacon	1922 C	West Palm Beach, Fla.
Beals, Harlo Peabody	1919 Ag	Wayland
Beals, Helen	1919 A	Worcester, Mass.
†Beam, Daniel Sayre	1921 Ag	Hemlock
†Bear, Burnett	1923 C	Carlisle, Pa.
†Beardslee, Harland Franklin	1922 M	South Pasadena, Cal.
†Beardsley, Arland Frederic	1920 Ag	Trumansburg
†Beatty, Henry McIntosh	1922 M	Cleveland, Ohio
†Beatty, Willard Chrisler	1922 A	Roscoe
Bechtel, Albert Reiff, B.S., A.M.	Grad	Royersford, Pa.
Beck, Florence Gertrude	1921 Ag	Aurora
†Beck, Martin Grinnell	1920 Ag	Aurora
Beck, Robert J., A.B.	1920 M.D. (N. Y. C.)	Columbia, N. J.
Becker, Jennie	1920 A	New York City
Becker, Robert	1922 C	Corona
†Beckwith, Charles Allan	1921 M	Buffalo
Bedient, Harold Arthur, A.B.	Grad	Albion, Mich.
†Beebe, Marshall Franklin	1922 M	New Haven, Conn.
†Beecher, Robert Hoyt	1922 A (Chem)	Dansville
†Beeler, Charles Fox	1921 M	Hamilton, Ohio
Belcher, Harold Stewart, A.B.	1920 M.D. (N. Y. C.)	Newark, N. J.
Belden, Louise Fuller	1919 A	Fredonia
Bell, Donald Chesbrough, A.B.	1920 M.D. (N. Y. C.)	Madison, Wis.
†Bell, Raymond William	1920 Ag	Brasher Falls
Bell, Vivian Irene, A.B.	Grad	Waverly
†Bellios, Christopher Nicoloas	1921 L	Ashtabula, Ohio
Bellis, Bernard	1919 Ag	New York City
Bellows, Margaret, B. A.	Grad	Brooklyn
†Bemis, Lloyd Edward	1920 C	Chicago, Ill.
†Bender, Van Kirk	1922 L	Mineral City, Ohio
†Bendet, Julius	1921 A (Chem)	New York City
Benedict, John King	1921 A 1923 C	Poughkeepsie
Benenson, Aaron	1922 A	Napanoch
Bengtsson, Otelia Josephine	1919 A 1922 M.D.	Ossining
†Benham, John Latham	1921 A (Chem)	Niagara Falls
†Benisch, Henry John	1920 C	Brooklyn
Bennett, Curtis Burnam	1919 C	Richmond, Ky.
†Bennett, Martin James	1922 Ag	Milford
†Bennett, Theodore Lake	1921 A	Geneseo
†Bennett, William Sabin, jr.	1919 L	Cody, Wyo.
Benson, Harold Jean	1922 C	Brooklyn
Benson, John Phineus, B.S.	Grad	Ithaca
Benson, Joseph Phillips	1919 V	New York City
Benta, Kenneth Lowell	1922 A (Chem)	New Rochelle
Bentley, James Stuby	1922 A	Sheridan, Wyo.
Bentley, Martyn Zug	1922 M	Youngstown, Ohio
†Benvenuto, John Anthony	1921 Ag	Corona
Benz, Harry	1922 A	New York City
Berglas, Jacob Benjamin	1919 A 1922 M.D.	Brooklyn
Berkeley, Florence	1919 Ag	Brooklyn
Berkoff, Harry Sidney	1920 A	Ithaca
Berkowitz, Morris	1920 A	Brooklyn
Berliner, Sidney George	1922 M	New York City
Berls, Madelina Olga	1919 Ag	New York City
†Berman, David	1922 L	Bayonne, N. J.
†Berman, Irving Louis	1921 Ag	Brooklyn

†Berman, William	1922 A (Chem)	Rochester
Bernard, William Stewart	1922 Ar	Dayton, Ohio
†Bernhardt, Isidor Harold	1919 Ag	Brooklyn
Bernstein, Sybil Sylvia	1922 A	New York City
Bershansky, Ida	1922 A	Honey Grove, Tex.
Beskin, Theodore Hyman	1922 M	Newport News, Va.
†Betts, Howard Messerer	1921 M	Minneapolis, Minn.
†Betts, William Royston, jr.	1921 Ag	Highwood, N. J.
†Beyer, Benjamin Wesley, jr.	1920 M	Cincinnati, O.
†Bickel, William Dosh	1921 M	Pittsburgh, Pa.
Bickford, Edwin Blake	1920 Ag	Elmira
Billheimer, Marguerite Pevra	1922 A (Chem)	Homestead, Pa.
Biloon, Sol, B.S.	1919 M.D. (N. Y. C.)	New York City
†Binder, Samuel Laurence	1922 Ag	New York City
Binswanger, Samuel Emanuel	1919 Ar	Richmond, Va.
†Bird, Samuel Bancroft	1921 M	Wilmington, Del.
Birdsall, Elias Mulford	1922 A	Newark, N. J.
†Birdsall, Russell Evans	1922 A	Tarrytown
†Birn, Henry Alter	1923 M	Brooklyn
Bishop, George Mallory	1922 M	Southampton
†Bissell, Thomas Ashley	1922 M	Buffalo
Bitterbaum, Mortimer	1922 M	New York City
†Black, Abraham	1922 M	Rockaway Park
Black, Russell Van Nest, B.S.	Grad	Hightstown, N. J.
†Black, William Hilbert, jr.	1921 M	High Bridge, N. J.
†Blackburn, John Harold	1923 M	South Glens Falls
†Blackburn, Walter Gerard	1919 A (Chem)	Yonkers
†Blackwood, Albert James	1923 M	Buffalo
Bladen, Arthur McKinley	1922 M	Syracuse
Blake, Marion Elizabeth, A.B., M.A.	Grad	New Britain, Conn.
Blakeman, Ford Francis Seward	1920 A	Clinton
Blanchard, John David	1920 A	Groton
†Blanke, Donald Cutler	1921 A (Chem)	New York City
Blasbalg, Harry Hobart	1922 L	New York City
Blau, Albert, A.B.	1921 M.D. (N. Y. C.)	New York City
Blauvelt, Grace Brown	1921 Ag	Paterson, N. J.
Blauvelt, Katharine Hutton	1922 Ag	Syracuse
Blauvelt, Livingston	1920 Ag	Ithaca
Blauvelt, Louisa Simpson	1919 Ag	Canajoharie
†Bleecker, Winthrop Gilman	1920 M	New York City
Bleiman, Gladys Katherine	1919 A Grad	New York City
†Blew, William Harry	1919 M	Niagara Falls
Bliss, Grace Huntington	1919 A	Jamestown
Blodgett, Elsie Bernice	1922 A	Corning
†Blodgett, Harold William	1921 A	Corning
Blodgett, Helen Matilda	1920 Ag	Dunkirk
†Blodgett, Vernon Wilson	1922 Ag	Rushville
Bloom, Dora Ruth	1919 A	Paterson, N. J.
†Bloss, Joseph Blossom	1922 A	Rochester
Blowers, Irma Kathryn	1920 A	Westfield
†Bloy, Myron Barnett	1920 Ag	Detroit, Mich.
Blum, Abram	1922 M	Brooklyn
Blumberg, Dorothy Goldie	1922 A	Corning
Blumberg, Ralph, A.B.	1920 M.D. (N. Y. C.)	Brooklyn
†Blume, Adrian Franklyn	1921 Ag	Brooklyn
Boardman, Arthur Clinton	1922 C	Elmira
Boardman, Emma Irene, A.B.	1920 M.D. (N. Y. C.)	Springfield, Mass.
Bock, George Frederic, A.B.	1921 M.D. (N. Y. C.)	Lancaster
Bodansky, Aaron, B.S.	Grad	Ithaca
†Boehm, Arthur Bruce	1919 M	Baltimore, Md.
Bogart, Harold Elmer, A.B.	1921 M.D. (N. Y. C.)	New York City
†Bogart, Ralph Forbes	1921 A (Chem)	Upper Montclair, N. J.
†Bolan, Francis Joseph	1921 A	Waterbury, Conn.
†Bole, Lyman Watts	1919 Ag	East Hardwick, Vt.
†Bollinger, Ralph Leo	1921 M	Pittsburgh, Pa.
†Bollman, Henry Otto	1922 M	St. Louis, Mo.
Bolton, Caroline Grace	1921 A	Oil City, Pa.
Bolton, Luella Ann	1921 Ag	New Hartford
Bolton, William Wordon	1921 A	Oil City, Pa.
†Bond, Frederick Henry	1922 Ag	Jamestown
†Bond, Lyman Ormsbee	1920 Ag	Port Henry
†Bookstein, George Joseph	1921 Ag	Albany
Boole, Helen Grace	1919 Ag	Ithaca
Bool, Mildred Storm	1922 A	Ithaca
Boorstein, Isadore Harris	1920 A	Bayonne, N. J.
†Boos, John Kenneth	1922 A (Chem)	New York City
Booth, Harold Simmons, A.B., A.M.	Grad	Cleveland, Ohio
Booth, James David	1922 M	Longmeadow, Mass.
†Boothby, Clark Nathaniel	1922 L	Benton Harbor, Mich.
Borach, Jacob Lebowitz	1921 V	New York City
Bork, Mildred Margaret	1922 A	Buffalo

†Bosanko, Arthur Kingsley	1921 A (Chem)	Glens Falls
†Bosworth, Henry Burt	1921 Ag	Buffalo
†Bott, Clarence Comstock	1921 M	Clinton
Boudin, Eleanor	1921 A	Brooklyn
†Bovaird, Donald Walker	1922 A	Bradford, Pa.
Bowen, Elizabeth	1921 Ag	Randolph
Bowen, Elsie Katherine	1922 Ag	Hartford
†Bower, Harold Ferdinand	1921 M	Johnstown
Bowers, Cyril Yarling	1919 M	Dayton, Ohio
†Bowles, Robert Brigham	1920 C	Houston, Tex.
†Bowman, Harold Cook	1919 M	Ogdensburg
†Bowman, Theodore	1921 Ag	White Plains
†Boyd, George Adams	1921 A (Chem)	Wallkill
Boyer, Hedwig Marie	1922 A (Chem)	Buffalo
Bradley, Catherine Gibbons	1920 A	Hoosick Falls
†Bradley, Fred Van Ness	1921 A	Rogers City, Mich.
†Bradley, Fred Warren	1923 M	Bath
Bradley, Ruth Winifred	1919 A	Silver Springs
†Brady, Samuel Dunlap, jr.	1921 C	Fairmount, W. Va.
Braman, Hazel Elizabeth	1922 A (Chem)	Homer
Branch, Hazel Elisabeth, A.B., A.M.	Grad	Wichita, Kans.
Brandt, Mary Elizabeth	1922 A	Montgomery, Mo.
†Brauer, Benjamin Bernard	1921 A (Chem)	Jersey City, N. J.
Braun, Sidney	1922 M	New York City
Brause, Esther Rella	1921 L	Glen Cove
†Brayman, Eugene	1921 C	Penn Yan
Brayman, George Irving	1922 C	Walton
†Brayman, Harold Leslie	1920 A	Middleburg
Breck, Frances Louise	1919 A	Bloomfield, N. J.
†Breen, John Beckman	1923 C	Dayton, Ohio
Breen, John Clark	1922 L	Utica
†Breese, Lyman Malcolm	1922 L	Elmira
†Brennan, Harold Edmund	1921 A	Yonkers
†Brenner, Jacob	1921 M	Union Hill, N. J.
†Brenner, Louis	1922 A	New York City
Bretch, Mildred Elena	1922 A	Clayton
Brew, Mary Frances, B.A.	1920 M.D. (N. Y. C.)	Brooklyn
†Brewster, Eugene Rainier	1922 Ag	Marion
Brewster, Irene	1920 Ag	Cornwall
†Bridahan, Lester Burbank	1922 A (Chem)	Denver, Colo.
†Bridgman, Robert Rice	1923 M	Hamburg
†Briegal, Julius Leo	1921 Ag	Briarcliff Manor
†Briggs, Leslie Eadie	1921 L	Homer
Bright, Fannie Jean	1921 Ag	Lansdale, Pa.
†Brill, Elias	1922 Ag	Ithaca
†Brillinger, Henry Beitzel	1921 M	York, Pa.
Britton, Edith Rosaline	1922 A	Buffalo
†Broadbent, Frank Walton	1921 Ag	Lihue, Hawaii
Brock, Frances Rosalie	1920 Ag	Mount Vernon
†Brockway, John Dunn	1923 M	Syracuse
Brodsky, Marcia Mae	1922 Ag	Philadelphia, Pa.
†Brogan, Thomas Henry	1921 Ag	New York City
†Bromer, Edward Harold	1923 M	Schwenkville, Pa.
Brooks, Daniel Bosley	1919 Ag	Cockeysville, Md.
†Brooks, Jay Tracy	1923 M	Halstead, Pa.
Brooks, Kathryn Blanche	1922 Ag	Batavia
†Brosnan, John Ignatius	1922 Ag	Washington, D. C.
Brotherhood, Lillian Fred	1921 Ag	Seaford
Brown, Blanche Laura	1921 A	Webster
†Brown, Charles Edward	1922 A	Shortsville
Brown, Chauncey Fairfield, A.B.	1920 M.D. (N. Y. C.)	La Crescenta, Cal.
Brown, Cremer Francis	1922 M	Cleveland, Ohio
Brown, Edith Rhoda	1922 A	Ithaca
Brown, Edwin Hobart	1922 M	Altoona, Pa.
Brown, Ellsworth Sheffer	1921 V	Shortsville
Brown, Forrest Jagger	1922 C	East Marion
†Brown, Gordon George	1922 M	Utica
Brown, Henry George	1922 A	South Dayton
Brown, Laura Bayette	1919 A	Ithaca
†Brown, Norman Pierson	1921 Ag	Bernardsville, N. J.
†Brown, Richard Harter	1919 L	Romulus
Brown, Roger Crafts	1919 A 1922 M.D.	La Crescenta, Cal.
†Brown, Victor Arthur	1923 M	Randolph
†Brown, Wesley Bennett	1920 M	Sidney
Bruckheimer, Alleyne Henry	1919 A	Buffalo
Bruckheimer, Sydney Morris	1923 M	Buffalo
Bruckner, Mable Amelia	1922 Ag	Hastings-on-Hudson
Brumfield, Thelma Flournoy	1922 A	Richmond, Va.
Brundage, Ralph Wesley	1922 Ag	Hornel
Brundidge, Violet Florence	1920 Ag	Oneida
†Brunett, Earl Louis	1922 V	Herkimer

†Bruns, Bernhard Henry	1921 A	Orange, N. J.
†Brush, Harry Leslie	1922 A	Susquehanna, Pa.
Bryan, Josephine Stevens	1921 A	Ithaca
Bryant, Carleton Elliott, jr.	1922 C	Mount Vernon
Bryant, Maynard Luther	1921 V	Troy
Bryne, Gladys Adelle	1920 Ag	Auburn
†Bubb, Harris Trevette	1923 M	Jersey Shore, Pa.
Buck, Clifford Martin	1922 Ag	LaGrangeville
†Buck, Harry Emmer	1921 Ag	Newark Valley
Buck, Nellie Leona	1922 A	Groton
†Buckley, Sidney Slater	1919 Ag	Tuckahoe
†Buckley, Theodore Tallmadge, jr.	1921 Ag	Cambridge
†Buehler, Leon, jr.	1921 M	Mount Vernon
†Buhl, Theodore Albert	1922 Ag	College Point
†Bull, Arthur Walker	1919 A (Chem)	Port Henry
†Bullard, George Percival	1919 C	Ithaca
Bullard, Helen Elise	1919 Ag	Schuylerville
†Bullard, John Flower	1922 V	Ithaca
†Bullard, Thomas Kenneth	1922 Ag	Schuylerville
†Bullen, Avery Lockhart	1922 M	Ticonderoga
Bullen, John Nixon	1920 Ar	Chicago, Ill.
†Bullock, Clayton Morse	1922 A (Chem)	Sharon Springs
Bungart, Paul Mercer	1921 Ag	Oceanside
Burchfield, Alice Kyle	1922 A	Buffalo
Burden, Louise Helen	1922 A	Canandaigua
†Burdick, Harold Lorenzo	1923 M	Binghamton
Burk, Richard Martin	1921 M	Okmulgee, Okla.
Burk, Robert Emmett	1922 A (Chem)	Okmulgee, Okla.
†Burke, Franklyn Emmett	1922 A (Chem)	Rochester
†Burke, Thomas	1919 A	Oneida
Burke, William James	1922 A	Oneida
Burns, Mildred Elizabeth	1920 A	Burdett
†Burns, Robert Connor	1921 A (Chem)	Ithaca
Burroughs, Kenneth Cook	1922 M	Geneva
†Burrows, George Lord	1922 Ag	Saginaw, Mich.
Burstein, Julia	1922 A	Brooklyn
Burt, Lester Pultz	1919 M	Catatonk
†Burton, Euclid Orrel	1922 M	West Chazy
†Busch, Ralph Bering	1922 M	Cincinnati, Ohio
†Bush, Harold Watrous	1922 C	Warsaw
Butler, Annie Louise, A.B.	Grad	Procter, Vt.
†Butler, Bryant Ormond	1921 Ag	Catonsville, Md.
Butler, Gertrude Elinor	1922 A	Troy
†Butterfield, Mondel Ely	1922 M	Oneonta
†Butts, George Samuel	1922 Ag	Sodus
†Buys, John Levenus	1919 Ag	Sodus Point
†Byrd, Ralph Hamilton	1920 M	Suffolk, Va.
Byron, Charles Stanford	1919 A 1922 M.D. (N. Y. C.)	Brooklyn
Cable, Elva Mae	1921 A	Walton
†Cacchione, Peter Vincent	1922 A	Sayre, Pa.
Cadiz, Edwin Firth	1920 A	Brooklyn
Cady, Elizabeth Catherine	1919 A	Milford
Cahan, Harry Bruce	1921 L	Philadelphia, Pa.
Cahill, Genevieve Elizabeth	1922 A	Auburn
Caldwell, Wiley North	1922 M	Oak Park, Ill.
Calkins, Donna Rosamond	1921 A	Oakfield
Call, Evelyn Clara	1919 Ag	Stafford
†Call, William Frederick	1922 M	Niagara Falls
†Callan, Maynard Frank	1923 M	Buffalo
Callahan, Alice	1920 A	West New Brighton
†Callender, John Pierce	1922 V	Whitfield, N. H.
†Calloway, Robert Woodward	1922 C	Baltimore, Md.
†Caminez, Harold	1920 M	Brooklyn
†Campbell, Frank Lincoln	1921 A	Omaha, Neb.
†Campbell, James Monroe	1919 A	Oklahoma City, Okla.
†Campbell, John Joseph, jr.	1923 M	New York City
Campbell, Margaret G.	1921 Ag	Valapraiso, Ind.
†Campion, Stephen Anthony Martin	1921 A (Chem)	East Orange, N. J.
del Campo, René César	1922 M	Havana, Cuba
Cantor, Isadore Jerome	1922 A (Chem)	Buffalo
†Caplan, Louis	1921 A	Albany
Carboni, Mary Catherine	1922 A	Ithaca
†Card, Chase Gifford	1923 M	Auburn
†Card, Dana George	1919 Ag	Sylvania, Pa.
Carey, Daniel John	1919 Ag	Ithaca
†Carey, James Lennox	1922 A (Chem)	Syracuse
Carll, Haidee	1920 A	Halesite
†Carlson, Earl Leonard	1922 M	Smethport, Pa.
Carmalt, Helen Amelia	1919 A	Brookville, Pa.

Carmer, Lillian	1922 A	Olean
†Carpenter, Benjamin Palmeter	1922 M	Washington, D. C.
Carpenter, Charles Milton	Grad	Ithaca
Carpenter, Charles Wilson	1922 C	Lake Mahopac
Carpenter, Clifford Deane	1920 V	Unadilla
†Carpenter, Leland Pope	1923 M	South Edmeston
†Carr, Hugh Roderick	1920 M	New York City
Carrasco, Juan Leopoldo	1919 M	Temuco, Chili
†Carrier, Egbert Wendell	1921 A (Chem)	Phoenix
†Carrington, Ralph Hermon	1922 M	Oneonta
Carrino, Constantine Nicholas	1920 M	Brooklyn
Carroll, Arlo Bowlby	Sp Ag	Ithaca
Carroll, Jane Garry	1919 A	Cleveland, Ohio
Carson, James Reed	1920 M	Pittsburgh, Pa.
Carter, Charles Homer	1922 Ag	Marathon
Carter, Ellsworth Jackson	1922 A	Lowville
†Carter, Lorraine Whitney	1923 C	Worcester, Mass.
Carty, John Russell, B.S.	1921 M.D. (N. Y. C.)	New York City
†Carver, Kenneth	1920 Ar	Brooklyn
†Cary, Edward Beverly	1920 A	Roanoke, Va.
†Cary, William Harvey, jr.	1922 C	Buffalo
†Casey, Francis Lawton	1922 A	Batavia
†Casey, James Van Schoon Hoven	1923 C	Mohawk
†Caslick, Edward Albert	1922 V	Newfield
Cass, John Lewis	1922 M	Salem, Mass.
†Cassin, William Mains	1921 Ag	Sodus Point
Castro y Fernandez, Rafael Maria	1921 L	Santurce, P. R.
Cerchiara, Camillo Anthony, B.S.	1922 M.D. (N. Y. C.)	New York City
†Chadwick, John Rappleye	1921 Ag	Ithaca
Chambers, Melber Bowers	1922 A	Larchmont
Champlin, Calbraith Perry	1922 M	Buffalo
Champlin, Pearl Edith	1920 Ag	Oneida
†Chandler, Carroll Wesley	1922 A (Chem)	Moravia
†Chandler, Fred Charles	1922 M	Cleveland, Ohio
Chao, Kuo-Tung	1919 M	Tientsin, China
Chapman, Dorothy Lyon	1919 Ag	Port Richmond
†Chapman, Paul Andrew	1922 A (Chem)	Auburn
Chapman, Phyllis	1919 Ag	New York City
Chardon, Carlos E.	1920 Ag	Ponce, Porto Rico
Charles, Delphine Kathryn	1920 A	Warsaw
Chase, Edward Axtell	1923 M	Horseheads
†Chase, Russell Nichols	1922 A	Cleveland, Ohio
†Chaskin, Harold S.	1921 M	New York City
Chasman, Israel, B.A., M.A.	Grad	San Antonio, Tex.
†Chavanne, John Joseph, jr.	1921 C	Woodhaven
†Chelimer, Miles Byron	1920 Ag	New York City
Chen, Che Kwei	1919 A	Peking, China
Chen, Chunjen Constant	1920 Ag	Shanghai, China
†Cheney, David William	1922 V	St. Regis Falls
Cherouny, Helen Elise	1922 A	Brooklyn
†Chesnut, George Spohr	1922 A (Chem)	Hyattsville, Md.
†Cheston, James Hunter	1921 C	Yonkers
Chiavetta, Thomas Charles	1920 A (Chem)	Brant
Childs, Mary Elizabeth, A.B.	1922 M.D.	Bernardsville, N. J.
†Chirlian, Gustave	1921 C	New York City
†Chobot, Edwin Frank	1921 C	Brooklyn
Chow, Yen Shuen	1919 A	Shanghai, China
†Christ, Lesley Roland	1923 C	Warsaw
†Christensen, Walter Carl	1921 C	Perth Amboy, N. J.
Christian, Joseph Howard	1920 C	Millville, Pa.
†Christianson, Christian	1922 M	Butler, Pa.
†Christie, Clyde	1919 L	Bergenfield, N. J.
Church, Edith Holley	Sp Ag	Ithaca
†Churchill, Charles Harvey	1923 M	Canton
Churchyard, Elizabeth Thompson	1919 Ag	Ithaca
Chwang, I-Kuei, B.S.	Grad	Tientsin, North China
Chynoweth, Walter John	1919 V	Williamstown, Vt.
Cilloniz, Miguel	1922 M	Lima, Peru
Cintra, Luiz de Cerqueira	Sp Ag	Sao Paulo, Brazil
Cisler, Walter Lee	1921 M	Gradyville, Pa.
Clafin, Dorothy Elizabeth	1922 Ag	Washington, D. C.
Clapp, Mary Elizabeth	1921 A	Ithaca
Clark, Frances Hilda	1922 Ag	Fulton
†Clark, Francis Joseph	1922 L	Pawling
Clark, Helen Sophia	1919 Ag	Munnsville
†Clark, Lee Hinchman	1919 A (Chem)	Brooklyn
Clark, Margaret Kimber	1919 A	Fulton
Clark, Marie	1919 Ag	Watkins
Clark, Marion Anna	1921 A	Warsaw
†Clark, Philip Colegrove	1922 M	New York City
†Clark, Robert Gregory	1923 M	Cheyenne, Wyo.

†Clark, Robert Joseph	1922 A	Tully
*Clark, Ruth Hunting	1921 Ag	Belleville
Clark, Sarah Antoinette	1922 Ag	Belleville
†Clarke, Edwin Chauncey	1922 M	Skaneateles
†Clarke, Warren Hines	1920 M	Baltimore, Md.
†Clarkson, John Turner	1921 M	St. Louis, Mo.
Clary, Thomas James	1920 A	Seneca Falls
†Clay, George William, jr.	1921 M	New Orleans, La.
†Clay, Leon Gilbert	1920 C	New Orleans, La.
†Cleary, Louis Joseph	1923 M	Spencerport
†Clements, William Willis	1921 A	Devon, Pa.
†Clemminshaw, William Holbrook, jr.	1919 M	Cleveland, Ohio
Clinton, Charles Lewis	1920 A	Ithaca
Close, Elinor Agnes	1922 A	Westwood, N. J.
†Clyde, John Edward	1923 M	Chester, Pa.
Coad, Anna Cecilia	1919 Ag	Ithaca
†Coad, Joseph Henry Blandford	1922 Ag	Brandywine, Md.
†Cobb, William Gerard George	1922 C	New York City
†Cockcroft, Merle Leslie	1920 A (Chem)	Northport
Coffin, Edna Marilla	1922 A	Homer
Cohen, Ira Marsop	1922 A	Middletown
†Cohen-Contin, Jacob Selig	1920 C	New York City
Cohen, Jeannette	1919 A 1922 M.D.	Norton, Va.
Cohen, Julius Nathaniel, B.S	1922 M.D. (N. Y. C.)	New York City
Cohen, Miriam	1922 A	New York City
†Cohen, Morris Gilbert	1919 C	Monticello
Cohen, Nathalye Vera	1922 A	Paterson, N. J.
Cohen, William	1922 M	New York City
Cohn, Miriam Harriett	1920 Ag	Bath
Colby, Myron Edward	1919 A (Chem)	Gouverneur
†Cole, Kenneth Watkins	1922 M	Avon
Coleman, Warren Chapman	1922 A (Chem)	Ilion
†Coleman, William Worthy	1923 Ar	New York City
†Collins, Anthony Henry	1919 M	Des Moines, Ia.
†Collins, Edison Moore	1920 Ag	Livingston Manor
Collins, Jacob Roland, B.S., M.S.	Grad	Ithaca
Collins, Marie Taylor, A.B., M.A.	Grad	Kansas City, Mo.
†Collum, Thad L.	1920 C	Corsicana, Tex.
†Collyer, George William	1922 A	North East, Pa.
†Colonna, John William	1923 M	Tasley, Va.
Colony, Myron Wesley, B.Chem.	Grad	Bronxville
†Colsten, Alden	1921 Ag	New York City
†Coltman, William Pethick	1919 L	Peking, China
Colucci, Joseph	1921 A (Chem)	Holley
†Comstock, Oliver Dixon	1922 L	Brooklyn
†Condit, William Chapin	1922 A (Chem)	Nutley, N. J.
†Conklin, Frederick Samuel	1922 M	Shelter Island Heights
†Conklin, George Thomas	1922 M	Joplin, Mo.
Conklin, Ruth Daniels	1919 A	Joplin, Mo.
†Conkling, Frank Ellsworth, jr.	1922 C	Patchogue
Conlin, William Jerome	1920 V	Glens Falls
Conlon, Mary Agnes	1922 A	Ithaca
†Connolly, John Edwin	1921 Ag	Mount Kisco
Connor, Helen Margaret, A.B., A.M.	Grad	Terre Haute, Ind.
Conroy, Mary Agnes	1919 A	Hilton
†Constans, Frank Schille	1919 C	Chicago, Ill.
†Conway, Stanley Thomas	1920 L	Cohoes
Conwell, Dorothy	1922 M	Elmhurst
Cook, Elizabeth Rose	1919 Ag	Albany
†Cook, James Richard	1920 C	Gloversville
Cook, Junius Ford	1922 M	Whitney Point
Cook, Laura Clark	1920 A	Hillsdale, Mich.
Cook, Nelson Evans	1922 A	Wheeling, W. Va.
†Cook, Owen Shepard	1922 M	Marinette, Wis.
†Cook, Thomas Henry	1922 A	Owego
Cooke, Cora Elizabeth	1920 Ag	Lyons Falls
†Cooley, Earl Eleazer	1922 M	Milford, N. H.
†Cooley, George Raymond	1922 C	Kittanning, Pa.
Coombe, Marion Gertrude	1921 Ag	Minersville, Pa.
Coombs, Samuel Meade, jr.	1920 A	Bridgeton, N. J.
†Coon, William Hammill	1922 L	Homer
Cooney, Anna Mary	1921 Ag	Malone
Cooper, Dorothy Lydia	1921 A	Mattituck
Cooper, Elizabeth Terry	1921 Ag	Mattituck
Cooper, George	1922 A	Brooklyn
Cooper, Howard Newton, A.B.	1920 M.D. (N. Y. C.)	Little Falls
†Cooper, Jesse Sherwood	1920 A	Mount Vernon
†Cooper, Stuart William	1921 M	Houghton, Mich.
Cooper, William Miller, jr.	1922 C	Montclair, N. J.

*Deceased.

†Copeland, Dwight Lothrop	1922 C	Bridgewater, Mass.
†Copp, Herbert Guy	1921 M	Rock Island, Ill.
Corbett, Frances Lee	1921 Ag	Takoma Park, D. C.
†Corbett, Roger Bailey	1922 Ag	Takoma Park, D. C.
Corbin, Paul Eugene	1922 A (Chem)	Ithaca
†Cormack, Charles Marshall	1920 C	Buffalo
Cornblum, Edward	1922 L	Buffalo
Cornell, Edwin Burt	1923 M	Owego
Cornell, Helen Lois	1922 A	Buffalo
Cornell, Nelson Warren, A.B.	1921 M.D. (N. Y. C.)	Lockwood
†Corney, Blair Shipman	1922 C	New York City
†Cornish, Fred Grant	1923 M	Seneca Castle
Cornwall, Esther	1922 Ag	South Wales
Cornwell, Ralph Thomas Kline, B.Chem.	Grad	Northumberland, Pa.
†Cortese, Frank	1920 A (Chem)	Dunkirk
Cortina, César	1922 C	S. P. Macoris, San Domingo
Corwin, Grace Huntington	1921 A	Riverhead
Corwin, Louis Alfred	1919 V	Richmond Hill
Cottle, Frances Mirian	1919 A	Constable
†Coughlin, Maurice Gurnett	1923 M	Watkins
Coupal, Edward Taylor	1922 M	Buffalo
Coupe, Florence Elizabeth	1919 Ag	Utica
†Couse, Harry Bosley	1922 L	North East, Pa.
†Cover, Augustus Woodland	1921 M	Baltimore, Md.
†Cowan, James Samuel	1922 Ag	Hobart
†Cowan, John Mark	1923 M	Hobart
Cowley, Rafael Mario	1922 M	Havana, Cuba
Cowley, Raoul Faust	1922 A	Havana, Cuba
Cracco, Frederick Anthony	1921 A	Jersey City, N. J.
†Craig, Donald Keith	1922 M	Bernardsville, N. J.
Craig, Howard Reid, B.A., M.A.	1919 M.D. (N. Y. C.)	New York City
†Craighead, Samuel Judson	1923 M	Wilkinsburg, Pa.
Cramer, Earnest Faville, B.S.	Grad	Red Oak, Iowa
†Crampton, Albert Mason	1922 A	Moline, Ill.
†Crandell, Dean de Forest	1922 A (Chem)	Waverly
†Crane, Perry Benson	1922 L	Brooklyn
†Crane, Roderic Baird	1921 M	Omaha, Nebr.
Crawford, John Wellesley, M.D.	Sp M.D. (N. Y. C.)	New York City
†Crawford, Robert Patterson	1921 M	Erie, Pa.
†Cregan, James William	1923 M	Monroe
†Crisfield, Lloyd Zabriskie	1922 M	Brooklyn
†Crisfield, Richard Ilston	1921 M	Brooklyn
Crispell, Raymond Solomon, A.B.	1920 M.D. (N. Y. C.)	Kingston
Crissey, Stephen Roy	1922 Ag	Glenwood, N. J.
†Criswell, Howard Donald	1921 C	Washington, D. C.
†Cromwell, Charles Ivan	1923 M	LeRoy
Cronk, Harold Waldo	1922 M	Toronto, Canada
†Cross, Harold Ritchie	1922 A	De Kalb Junction
†Crouch, Harold Harter	1920 A (Chem)	Mohawk
Crouch, Margaret Paine	1919 A	Syracuse
†Crowley, Addison Gifford	1921 A	Randolph
Crowley, Katherine Elizabeth	1920 Ag	Canandaigua
†Croxtan, Herbert Pease	1922 M	Massillon, Ohio
Croxtan, James McLain	1921 M	Massillon, Ohio
†Crusel, Cornelius Campbell	1922 C	New Orleans, La.
Cruz, Carlos	1923 M	Guatemala, C. A.
Cubillos, Ernesto	1921 Ag	Bogota, Colombia, S. A.
†Cuffe, Frederick William	Sp M	Toronto, Canada
Culley, Paul Gamber	1921 A	Ithaca
†Cundell, John Vreeland	1922 M	Paterson, N. J.
Cunneen, Anna Elizabeth	1922 Ag	Port Jervis
†Cunningham, Newton Stanford	1922 Ag	Rochester
†Curphey, James Dodds	1920 A (Chem)	Dayton, Ohio
†Currie, Walter Beattie	1923 M	Truxton
†Curry, Aubrey Ramon	1920 M	Nassau, N. P., Bahamas
Curtis, Bartow Strang	1922 M	Elmira
Curtis, Carol	1921 Ag	Rochester
Curtis, Edwin Dixon	1922 M	Addison
†Curtis, Egbert Townsend	1921 A	Spring Valley
Curtis, Eugene Alden	1921 Ag	Rochester
†Curtis, George Graydon	1920 M	Rochester
Curtiss, Chloe Louise James	1919 Ag	Ithaca
Curtiss, Leon Francis, A.B.	Grad	Ithaca
Cushman, Dorothy Elizabeth	1921 Ag	Syracuse
Cushman, Edward	1922 M	Norwich
Cusic, Anna Elizabeth	1919 Ag	Huntington
Daily, Orville Guy	1920 A	Chicago, Ill.
Dainty, Margaret Ann	1922 Ag	Dunmore, Pa.
†Dale, Dwight Conn	1922 M	Franklin, Pa.
†Dalton, John	1922 M	Schenectady

Daly, Mrs. Adelaide Helen Cooke	1919 A	Washington, D. C.
Daly, Ivan Coakley	1921 A (Chem)	New York City
†Dalzell, Edmund Carnwath	1921 M	Ben Avon, Pa.
D'Ambrosi, Faust	1921 A	New York City
Damshefky, David	1922 M.D. (N. Y. C.)	New York City
Dangler, Alfred	1922 M	Cleveland, Ohio
Daniels, Helen	1922 Ag	Gilbertsville
Daniels, Helen Marion	1921 A	Dunkirk
†Daniels, Olin Ruffi	1923 C	Deposit
†Danker, Herbery Henry William	1921 Ag	New York City
†Dann, Walter Rowling	1922 A (Chem)	New Haven, Conn.
†Darby, William Edward	1922 A (Chem)	Lima, Ohio
Darling, Lina Reeves	1919 Ag	Binghamton
†Darling, Lockwood Fairchild	1923 M	Huntington
†Darling, Robert Ray	1922 Ag	Atlanta
Dartley, Said, B.S.	1922 M.D. (N. Y. C.)	Jersey City, N. J.
Dates, Hazel Adelia	1921 A	Groton
Dates, Helen Dorothy	1922 Ag	Groton
Dattelbaum, David Nathaniel	1922 A	New York City
†Davenport, Edward	1920 Ag	Accord
Davenport, Nellie	1921 Ag	Accord
Davey, Thomas Trude, jr.	1923 C	Northport
Davidson, Andrew Curle	1921 L	Cooperstown
Davidson, Alexander George, B.S.	1920 M.D. (N. Y. C.)	New York City
†Davidson, Harry	1919 A (Chem)	New York City
†Davies, Clinton William	1922 A	Pike
D'Avila, Raphael Miguel	1921 Ag	Tegucigalpa, Honduras, C. A.
†Davis, Alfred Hale	1920 A	Roscoe
Davis, Evelyn Nancy	1922 A	Haddonfield, N. J.
Davis, Henry Kennedy, A.B., A.M.	Grad	Ithaca
Davis, Herbert Briggs	1923 M	Varysburg
Davis, Irene	1922 A	Pittsburgh, Pa.
Davis, Marie Euphrasia	1922 A	Olean
†Davis, Myron Woodward	1922 A	Des Moines, Iowa
Davis, Rebecca	1919 A	Port Henry
†Davis, Rowland Fenner	1921 M	Dolgeville
Davis, Thomas Wallis, B.S.	1919 M.D. (N. Y. C.)	Utica
†Davison, Robert Otis	1921 M	Bath
†Dawson, Robert Mitman	1923 M	Watsonstown, Pa.
Day, Hazel Elizabeth	1921 A	Buffalo
Day, Helen Margaret	1919 A	Buffalo
†Deagon, Arthur	1921 C	Freeport
†Dean, Arthur Hobson	1920 L	Ithaca
†Dean, Carl Emmett	1922 C	Corry, Pa.
Dean, Edna Louise	1919 Ag	Ithaca
Dean, Marion	1921 Ag	Niagara Falls
†DeCamp, Clayton Earl	1922 A	Ithaca
†Dechert, Alvin William	1920 M	Buffalo
†Decker, Charles Guy	1922 Ag	Elmira
†Decker, Dwight Durand	1922 Ag	Owego
†Decker, Edward Newell	1922 Ag	Rye
†Degling, Albert Otto	1920 C	East Orange, N. J.
Dehner, Marie	1920 A	Ithaca
†Deitrick, Carroll Heiney	1921 M	Watsonstown, Pa.
†Deitz, Fordyce Charles	1919 Ag	Albany
Delaney, Frances Mary	1922 A	Watervliet
†Demarest, Charles Albert	1922 M	Piermont
DeMartinis, Jennie Margaret	1922 Ag	West Bloomfield
DeMoney, Ruth Ida	1922 Ag	Oquaga Lake
†Denneen, Edward Victor	1921 A	Buffalo
†Densmore, Richard Douglass	1921 A	Erie, Pa.
Denton, Gilbert Henry	1922 A	Denver, Colo.
DePue, Helen	1921 Ag	El Paso, Tex.
Derrick, Clara Harriet	Sp A	White Plains
Detwiler, John Detweiler, B.A., M.A.	Grad	Kitchener, Can.
†Devenbeck, Floyd Cornelius	1921 M	Herkimer
†Devitt, Wesley Gerald Soper	1922 Ag	Spring Valley
†DeVolt, Harold Moon	1922 V	Barneveld
Dewey, Doris Bell	1921 A	Castile
DeWitt, Madolin	1919 A	Lima
DeWolfe, Rachel Elizabeth	Sp Ar	Cortland
Deylen, Sophia Marie	1921 A	Brooklyn
Diamant, Joseph	1920 A (Chem)	Pine Hill
Diamond, Benjamin	1919 A 1922 M.D. (N. Y. C.)	New Brighton
Diamond, Joseph Henry	1919 A 1922 M.D. (N. Y. C.)	New Brighton
†Diamond, Robert	1922 Ag	New York City
†Dicianni, Leo James	1922 M	Buffalo
†Dick, Michael	1921 M	New York City
Dicker, Edward Eugene	1919 L	Ithaca
†Dickerson, George Myron	1923 C	Interlaken
†Dickinson, John Leroy, jr.	1921 Ag	Hudson Falls

Diehl, Susan	1919 A	Schenectady
Diel, Agnes Catherine	1919 Ag	New York City
†Diel, Francis Anthony	1922 Ag	New York City
†Dietrich, Charles William, jr.	1919 M	Brooklyn
†Dietzen, Hugh Nicholas	1921 Ag	Dunkirk
Dill, Florence Mary	1920 A	Buffalo
Dimelow, Grace Catherine	1920 Ag	Woodmere
†Diment, Horace Kinney	1921 M	Oswego
†Dinge, Ferdinand Charles Frederick	1921 Ag	Newark, N. J.
Dingle, Della Sara	1922 Ag	Burlington, Canada
Disbrow, Jayne	1921 A	Norwalk, Conn.
Dittmar, Albert Louis	1919 C	Williamsport, Pa.
Diven, Emerson Liscum	1920 A	Elmira
†Dockerill, Walter John	1921 Ag	New York City
Dodd, Wilson Farnsworth, Lit.B.	1920 M.D. (N. Y. C.)	New York City
Dodds, Dorothy Day	1920 A	Xenia, Ohio
†Dodge, Emmet Harry	1921 M	Akron, Ohio
Dodge, Loren Newell	1921 V	Moir
†Dodson, Willard Forrest	1922 M	Trenton, N. J.
Doelling, Hans Alfred Adalbert	1920 A	New Rochelle
†Dohm, William Herman	1922 V	New York City
†Dohring, Ferdinand William	1923 M	Gasport
Dolve, Robert Martinus, B.S. in Mech. Eng.	Grad	Fargo, N. Dak.
†Dominick, John Henry	1922 L	Buffalo
Donlon, Mary Honor	1920 L	Utica
Donner, Samuel, A.B.	1922 M.D. (N. Y. C.)	Hartford, Conn.
†Donnigan, Clarke Edward	1921 L	Alden
†Donovan, Thomas LeRoy	1922 M	New Cumberland, W. Va.
†Dorn, Harold Watson	1923 M	Spencer
†Dorn, Willis Lee	1923 M	Candor
Dorr, Eleanor McElroy	1922 A	Ithaca
†Dorrance, William Henry	1922 Ar	Camden
Dorsey, Jerry Spires	1921 A	Hico, Tex.
Doss, Nancy Elizabeth	1922 A	Shelbyville, Ky.
†Douds, Alton Calvin	1923 M	Allegany
Douds, Gladys May	Sp Ag	Allegany
Dougan, William Rolland	1922 A (Chem)	New York City
Douglas, Frank William, A.B., A.M.	Grad	Albion, Mich.
Douglass, Richmond, A.B.	1920 M.D. (N. Y. C.)	Shanghai, China
Douqué, Frances Gracia	1921 A	Herkimer
†Dow, Burton Cornelius	1922 C	Buffalo
Downs, Lucibel Irving	1919 A	East Quogue
Downs, Paul Andrew, B.S.	Grad	Waterbury, Conn.
†Dragat, Edward Saul	1920 L	Hartford, Conn.
Drake, Elizabeth Mary	1919 A	Bath, Maine
†Drake, Eugene Tolman	1921 Ag	Auburn
Drake, Frederic Dalton	1919 Ag	Buffalo
†Drake, Milton Carey	1920 A	Friendship
Drake, Paul Woodhull	1921 Ar	Morristown, N. J.
†Drake, Russel Raymond	1919 Ag	Dunkirk
†Drake, Sidney Hyres	1922 Ag	Nichols
†Drayo, Samuel Louis	1922 A (Chem)	Fredonia
†*Dressor, John Fritz	1922 M	Watertown
Driscoll, Alice Mary	1922 A	Ithaca
†Drury, Frederic Franklin, jr.	1923 M	Gouverneur
†DuBois, Harold Arthur	1922 Ag	Ridgewood, N. J.
†DuBois, Raymond Van Orden	1920 Ag	Forest Glen
Ducassee, Vidal	1920 C	Havana, Cuba
Duddy, Katharine	1921 Ag	Newark, N. J.
Dudley, Harold Jenkins	1922 A (Chem)	Silver Creek
Dudley, Leon Herbert	1919 A	Knoxboro
Duffies, Stanley Brittain	1920 Ag	Washington, D. C.
†DuMond, Frank Lee	1920 Ag	Kingston
†Duncan, Albert Stanley	1922 M	Brooklyn
Duncan, Natalie Woodland	1920 Ar	Philipsburg, Pa.
†Dunckel, Adrian Lewis	1923 M	Fort Plain
†Dunham, George Shellabarger	1922 M	Chicago, Ill.
Dunham, Norma Helen	1921 Ag	Liverpool
Dunn, Hazel Sarah	1919 Ag	Ithaca
Dunn, Percy Lawrence	1919 Ag	Ithaca
Durfee, Dorothy Diana	1919 Ag	Batavia
Durfee, Rufus Lee, A.B.	1920 M.D. (N. Y. C.)	Binghamton
Durham, George Eugene	1919 Ag	Carthage, Mo.
†Duryea, Garrett De Nyce	1921 A	Brooklyn
†Dutton, Audley Reynolds	1922 M	Ithaca
Dye, Harry Wilmer, B.S.A., M.S.A.	Grad	New Matamoras, Ohio
Dye, J. Alma, B.A.	Grad	Basalt, Idaho
Dynes, Oliver Wesley, B.S., M.S.A.	Grad	Ithaca
†Eagle, Evelyne Shawe	1923 M	Chicago, Ill.
†Eagle, Jacob Eugene	1922 A	Friendship

*Deceased.

†Early, Edward Donald	1921 M	Chattanooga, Tenn.
Eaton, Frank Gertrude	1920 A	Harrisburg, Pa.
Eaton, Harry Nelson, A.B., A.M., Ph.D.	Grad	Ithaca
Eaton, Mildred Estabrook	1922 A	Nyack
†Eberhardt, Frederick Gordon	1922 M	Newark, N. J.
Echeverri, Ricardo Camila	1921 A (Chem)	Bogota, Colombia, S. A.
†Ecker, Elston Andrew	1923 C	Oswego
†Eckerson, Harold Irving	1923 M	Akron
†Eckhardt, Albert John	1919 A	Woodhaven
†Eckhardt, Ralph Augustine	1922 A	Rochester
†Eddy, Laurence Wilson	1922 M	Bridgeport, Conn.
Edmonds, Eleanor Margaret	1921 A	White Plains
Edmonson, Ellen, A.B.	Grad	Newton, Kans.
Edsell, Elizabeth Ada	1922 A	Cedarhurst
†Edsell, Ralph James	1921 A	Cedarhurst
†Edwards, Arthur Robinson	1922 A	Marysville, Ohio
†Edwards, Harold Bostwick	1922 A	Utica
†Edwards, John Chubback	1920 A (Chem)	Hastings-on-Hudson
†Eidt, George Dewey	1921 M	New York City
Eiler, J. Scott	1920 Agr	Pittsburgh, Pa.
†Eisenbrandt, Alexander Schulz	1920 C	Baltimore, Md.
†Eisenhart, Donald Owen	1923 M	Binghamton
†Eisner, Benjamin	1920 C	Trenton, N. J.
†Eldrett, Walter Carleton	1922 M	Ithaca
†*Eldrid, Gerald Gordon	1923 M	New York City
Eldridge, Martha	1922 Ag	Washington, D. C.
Elli, Eduardo Luis Enrique, A.B.	1921 M	Santiago del Estero, Argentina
Elliott, Adelaide Hayward	1920 A	Dayton, Ohio
†Elliott, Basil Wheeler	1921 L	Tupper Lake
Elliott, Ida Mae	1919 A	Buffalo
†Elliott, Irving Miller	1921 M	Baltimore, Md.
Elliott, Martha Julia	1921 A	Ithaca
Elliott, William Perry	1919 A 1922 M.D.	New Berlin
†Ellis, Dewey Dorchester	1922 M	Albany
†Ellis, William Douglas	1920 M	Atlanta, Ga.
†Ellsworth, Frank Harold	1921 A (Chem)	Pittsfield, Mass.
Elson, John James	1922 A	Tonawanda
Elwood, Willis Henry	1922 M	Lockport
Ely, Esther Irene	1921 Ag	Poplar Ridge
Emerson, Sterling Howard	1922 Ag	Ithaca
Emerson, William Harold	1921 C	Ithaca
†Engel, Samuel	1920 C	Brooklyn
†Enos, Merton Wilfred	1923 M	Batavia
†Eppenstein, James Franks	1919 A	Elgin, Ill.
†Epstein, Haskel	1922 A (Chem)	Brooklyn
Epstein, Mildred Helen	1922 A	Elmira
†Erickson, Eric Sigfrid	1922 M	Brooklyn
†Erickson, Rudolf Thure	1923 C	Harrison
Ernst, Elsa Sophia	1922 A	Pelham
Errington, Jean Olive	1922 A	Staten Island
Erskine, Alice Hill	1921 A	New Brighton
†Estabrook, Kenneth Charlie	1920 Ag	Newfield
†Estes, Wellborn	1920 A (Chem)	St. Louis, Mo.
†Estey, Mark Clarence	1922 Ag	Orleans
†Estey, Stephen Merritt	1922 M	Manlius
†*Esty, Charles Glenn	1919 M	Belleville
Etzkowitz, Jennie Grace	1921 Ag	New York City
†Evans, Asher Ward	1921 Ag	Newark Valley
Evans, Earl Radford	1919 M	Great Barrington, Mass.
Evans, Jennette, B.S.	1922 M.D.	Atlanta
Evans, Russell Beaumont	1919 Ag	Paterson, N. J.
†Evans, William Harold	1922 C	Rome
†Evarts, Howard Mortimer	1919 M	Buffalo
Eveleth, Emily, A.B.	Grad	Little Falls
†Everitt, William Littell	1920 M	Peekskill
Ewald, Walter August Julius	1922 Ag	Utica
†Eyre, Francis Howlett	1922 Ag	Little Valley
Eyster, Lewis Arthur, A.B.	Grad	Fisher's Ferry, Pa.
Eyster, William Henry, A.B., A.M.	Grad	Ithaca
†Fabel, Donald Criston	1921 M	Cleveland, Ohio
†Fairchild, Frank Earle	1921 M	Brooklyn
†Fairfax, Charles Crittenden	1921 M	Geneva
Falconer, Frank Miller	1921 A	Jamestown
Fallon, Virginia Madelyn Jocelyn	1922 A	New York City
Fanning, Grace Kathryn	1922 A	Oswego
Farley, Margretta	1919 Ag	Campbell Hall
†Farley, Theodore Sumner	1921 M	Ithaca
Farnham, Laurence Vivian	1919 M	Owego

*Deceased.

†Farnsworth, Harold De Forest	1922 V	Marion
Farr, Archie Keith	1921 A	Cranberry Creek
Farr, Muriel Eldra	1920 A	Cranberry Creek
Farr, Walter John	1922 A	Hoboken, N. J.
†Farrington, William Jennison	1921 M	New York City
†Farver, Parker	1923 M	North East, Pa.
Faulhaber, Ethel	1921 Ag	Tuckahoe
Fayer, Charles	1923 M	Elmhurst
Fayer, Julia	1922 M	New York City
†Feehan, Hugh Vincent	1921 Ag	Ithaca
†Fein, Morris	1922 C	Brooklyn
†Feinson, Samuel H.	1922 C	Brooklyn
Feitelberg, Abraham	1919 A 1922 M.D. (N. Y. C.)	New York City
Feldman, Joseph	1922 M	New York City
Feldstein, Elwood Gerard	1922 A	New York City
†Felmer, Calvin Douglas	1921 L	New York City
Fenner, Gertrude Elizabeth Southworth	1922 A	Holley
†Fenton, Lucius Barzillai	1923 M	Nunda
Ferguson, Lucretia Hinkley	1920 A	Buffalo
†Ferguson, Ronald Hall	1922 L	Manchester, Conn.
Ferguson, Russell Sweetzer, A.B.,	1920 M.D. (N. Y. C.)	New York City
Fernandez, Manuel José	1921 M	New York City
†Ferris, Seymour Washington	1921 A (Chem)	Springfield, Mass.
†Fertel, Arthur	1920 C	Brooklyn
†Fether, Donald Wilfred	1922 M	Los Angeles, Cal.
†Feuerbach, William Anthony	1922 A	New York City
Fiedler, George Henry	1921 M	Rochester
†Field, Alden Waterbury	1922 M	Kalamazoo, Mich.
†Fincher, Myron Gusten	1920 V	Corfu
Fine, Abraham	1919 A 1922 M.D. (N. Y. C.)	Brooklyn
†Fingado, Gustav Albert	1922 M	Rosebank
†Finger, Salo Cyrus	1923 M	New York City
†Finkelstein, Harry Leon	1921 L	Ithaca
†Finkelstein, Merwin Jesse	1919 A (Chem)	Wellsboro, Pa.
†Finkernagel, William Edward	1920 M	New York City
†Finn, Thomas David, jr.	1920 C	Exeter, N. H.
†Fisch, Samuel Thomas	1921 Ag	Corona
†Fischer, Alfred Elias	1919 A	New York City
†Fischer, Charles William	1920 A (Chem)	Atlantic City, N. J.
Fischer, Robert Morris	1922 A	New York City
†Fisher, Charles Arthur	1922 Ag	Brooklyn
†Fisher, Donald	1919 M	Weedsport
†Fisher, Harold Snedaker	1920 C	Buffalo
Fisher, Julia Gertrude	1922 A	Clayville
Fisher, Marion Cornelia	1919 A 1922 M.D.	Ithaca
Fisher, Mary Jones, A.B., A.M.	Grad	Ithaca
†Fisher, Robert Bradley	1922 M	Ithaca
Fiske, Charles Stewart	1921 M	Baltimore, Md.
†Fitch, Lewis Elmer	1922 Ag	Windsor, Vt.
Fitzer, Mildred Julia Elizabeth	1922 A	Dunkirk
†Fitzgerald, James Bradford	1921 L	Roscoe
†Flagg, Bradley Lewis	1923 M	Spencerport
†Flautt, John Solon	1922 M	Aurora, Mo.
†Fleckenstein, Raymond Herbert	1921 A (Chem)	Ellenville
Fleet, Florence Perrott	1921 A	Huntington
†Fleming, John Rimer	1922 Ag	Brooklyn
†Fleming, Wilmer Stuart	1922 A (Chem)	Beaver, Pa.
†Fletcher, Charles Henry	1922 A (Chem)	Detroit, Mich.
†Flint, George Pogue	1923 M	New York City
Flint, Joseph Howard	1920 A (Chem)	Athens
Flockhart, Marguerite Craig, A.B.	Grad	Newark, N. J.
†Florio, Anthony John	1923 M	Cobleskill
†Florsheim, Harold Milton	1920 A	Chicago, Ill.
Fogle, Harold	1922 M	Dansville
Fonda, Cornelia Dockstader	1919 Ag	Fonda
†Fonda, Forde Lipe	1922 Ag	Sharon Springs
Fonda, John Sutliff	1922 A (Chem)	Johnstown
Foote, Eleanor Margaret	1921 A	Lockport
Ford, Mary Ellen	1919 A	Belfast
†Forster, Murrill Hamilton	1921 C	Buffalo
Fortune, Ethel Margaret	1920 Ag	Malone
Foster, Dudley Edwards	1922 M	Morristown, N. J.
†Foster, Edward Swanson	1921 A	Carbondale, Kans.
Foster, Hodgen Torrey	1922 M	Utica
Foster, Ruth	1920 A	Central Park
†Fowler, Almon James	1919 Ag	Wyoming, Pa.
†Fowler, Roland George	1922 M	Newfield
†Fox, DeForest Eben	1919 A	Worcester
Fox, Jeannette Minnie Meyerowitz	1919 A	Buffalo
Fox, Theresa Anna	1921 A	Buffalo
Fraats, Helen Maisie	1921 Ag	Sharon Springs

†France, Morris Giles	1920 Ag	Seward
†Francis, Howard Nelson	1921 L	Syracuse
Francis, James Franklin	1922 M	Shamokin, Pa.
†Francis, Reese Richard	1923 C	Belleville, N. J.
Francis, William Carson, B.S.Ar.	Grad.	Buffalo
Frank, Clarence Monroe	1922 M	Chicago, Ill.
†Frank, James Vernon	1922 L	Poplar Bluff, Mo.
Frank, Mary Irene	1920 A	Oil City, Pa.
†Franklin, Paul Benjamin	1920 A	New York City
Fraser, Cuthbert Bancroft	1919 Ag	Buffalo
†Fratanduono, Frank A., jr.	1920 M	Philadelphia, Pa.
†*Frazier, Lester Hunter	1922 C	New Bethlehem, Pa.
Freedman, David	1922 M.D. (N. Y. C.)	New Brighton
†Freeman, Louis Sidney	1922 C	Wharton, N.J.
†Freeman, Ralph Francis	1921 M	Mendham, N. J.
French, Dorothy Chandler	1922 A	New York City
French, Katherine Bennett	1922 Ar	Ypsilanti, Mich.
†French, Lewis Miller	1921 Ag	New Orleans, La.
French, Thomas Morton, A.B.	1920 M.D. (N. Y. C.)	Jamaica
†Frenzel, Otto Nicholas, jr.	1922 L	Indianapolis, Ind.
Freuchen, Thord Harrie	1920 M	Bergen, Norway
Freund, Regene Robinson	1920 L	New York City
†Frey, John Jacob	1922 M	Hammondsport
†Frick, Paul Hilliard	1920 Ag	Fleischmanns
†Friderici, Kenneth Schuyler	1920 V	Amsterdam
†Friedman, Julius Leo	1922 Ag	Brooklyn
Friedman, Miriam	1922 A	New York City
Friedman, Sidney	1922 M.D. (N. Y. C.)	New York City
†Friedman, William Edward	1921 A (Chem)	Brooklyn
Fries, Margaret Evelyn, B.A.	1920 M.D. (N. Y. C.)	New York City
†Fritz, Eduard, jr.	1920 C	Poughkeepsie
†Fritzsche, Alfred Louis, jr.	1921 Ag	Cleveland, Ohio
Frolichstein, Leona Corrine	1922 A	Far Rockaway
Frost, Walter Sprague, B.S.	Grad	Ithaca
†Fuchs, Nathaniel	1919 A (Chem)	Brooklyn
Fudge, Russell Gerard	1922 C	Elmira
†Fuller, Andrew James	1923 M	Herkimer
Fuller, Harold Bentley	1919 Ag	Greene
Fuller, James West	1920 V	Springville
†Fuller, William Harrison, jr.	1923 M	Silver Creek
†Fullington, Benjamin Warder	1922 L	Columbus, Ohio
Fulton, Elizabeth Mills, A.B.	1921 M.D. (N. Y. C.)	Hogansburg
Funnell, Bertha Hewett	1922 A	Huntington
Funnell, Esther Hawley	1919 Ag	Huntington
†Gaccione, Anthony Salvator	1921 A	Lyndhurst, N. J.
†Galbreath, Mitchell Tift	1922 M	Brooklyn
†Gale, William McClure	1921 M	New York City
Galland, Walter Isaac, A.B.	1920 M.D. (N. Y. C.)	Wilkes-Barre, Pa.
†Gallienne, James Douglas	1923 M	Huntington
†Gallivan, Peter Coleman	1921 A (Chem)	Buffalo
†Gallman, Waldemar John	1921 A	Wellsville
Gamble, Dean, B.S.	Grad	Ithaca
†Gans, Carl Hamann	1922 A	High Bridge, N. J.
Garabedian, Vartan	1922 Ag	New Haven, Conn.
†Garden, Nelson Barker	1922 M	Pittsburgh, Pa.
†Gardiner, Douglas Elton	1922 A	Herkimer
Gardner, Esther	1921 A	Endicott
†Gardner, Joseph Charles	1922 Ag	Hudson Falls
Garfinkel, Harry	1922 C	Brooklyn
Garnar, Elizabeth Ogden	1921 A	Luzerne
Garrabrant, Robert Bayard	1922 C	Bloomfield, N. J.
Garrett, Henry Harrison	1922 A (Chem)	Pittsburgh, Pa.
†Garside, Charles Clifford	1921 L	Meriden, Conn.
Gates, Catherine Maria	1922 A	Oneonta
†Gates, Donald Edson	1922 M	Washington, D. C.
†Gates, Edward Crossett	1921 M	Crossett, Ark.
Gauger, William Henry	1920 A (Chem)	Buffalo
Gavin, Helen, M.A.	1922 M.D. (N. Y. C.)	New York City
†Gawne, Spenser Stranahan	1920 A	Cleveland, Ohio
†Gebhard, John Charles	1919 C	New York City
†Geertz, Allan Ormsbee	1922 M	Montclair, N. J.
Geisenhoff, Ruth Rebecca	1920 Ag	Oneida
†Gelman, Abraham	1923 C	Brooklyn
†Gennis, Milton H.	1922 M	Dolgeville
Gentry, Charles Burt, A.B., S.B.	Grad	Springfield, Mo.
†George, Emerick Abraham	1922 M	Chaumont
†Geraci, Michael Philip	1923 M	Buffalo
Gerber, Helene Adele Henriette	1919 A	Stapleton
Gerber, Marian	1919 A	Philadelphia, Pa.
†Gerbereux, Eugene Wilson	1923 M	Kansas City, Mo.

*Deceased.

Gericke, Hjalmar	1922 C	Sao Paulo, Brazil
Gericke, William Henry	1922 M	Sao Paulo, Brazil
†Gershberg, Benjamin	1921 A	Albany
Gershel, George Falk	1922 M	New York City
†Gibb, John Collins	1921 M	Ithaca
Gibb, Mary Murison	1923 Ar	Ithaca
Gibbons, Lois Oliphant, A.B., M.A.	Grad	Philadelphia, Pa.
†Gibbs, Roy Delbert	1921 Ag	Ellensburg Center
†Giddings, Edward Burr	1921 Ag	Baldwinsville
†Gifford, Floyd Parsons	1923 M	Aurora
Gilkey, Gladys Fay	1919 A	Ithaca
†Gill, Edmund Francis	1922 L	Oswego
Gillam, Gertrude Asenath	1919 A	Lockport
Gillan, Paul LaVerne	1923 M	Waverly
†Gilland, William Joseph	1922 M	Waterbury, Conn.
†Gillespie, Louis Frank	1922 L	Springfield, Ill.
Gillett, Gertrude Nelson, B.S.	Grad	Ithaca
Gillett, Ida Jane	1919 Ag	Colden
†Gillett, Maurice Edwin	1920 C	Niagara Falls
Gillett, Roy Lewis, B.S.	Grad	Colden
†Gillette, Kenneth Gordon	1921 M	Grahamsville
†Gillette, Meredith Franklin	1922 A	Sharon, Conn.
†Gillies, George Matthew, jr.	1922 M	Elizabeth, N. J.
†Gilliland, Mathias Wesley	1922 M	Dallas, Tex.
†Gilmartin, Daniel Thomas, jr.	1919 A	Westfield, N. J.
†Gilmore, Albert Vernon	1921 L	Rockaway Beach
Gilmour, Madeline Fay	1920 A	Vernon
Ginsberg, Diana Lucy	1922 A	Brooklyn
Girdner, Mary Evelyn	1919 A	New York City
Giusti, Frank Louis	1922 L	West Hoboken, N. J.
†Glaser, Jerome	1919 A 1922 M.D.	Sayre, Pa.
†Glaser, Sidney Udell	1922 M	Sayre, Pa.
†Glasser, Benjamin Frank	1920 A (Chem)	New York City
†Glathe, Henry Bernhard	1921 M	Brooklyn
Gleason, Charles Richard	1921 A (Chem)	Van Wert, Ohio
†Glotzer, Harry Eli	1922 L	Hartford, Conn.
†Glotzer, Isadore	1921 L	Hartford, Conn.
Godfrey, Lydia Lorinda	1921 A	Trumansburg
Goeller, Jacob	1922 M.D. (N. Y. C.)	Irvington, N. J.
Goessling, Albert Alston	1921 M	Bronxville
†Goetz, William Palmer	1922 A	Lancaster
†Goetzmann, Arthur Charles	1922 A (Chem)	Buffalo
Goff, Edith Adelaide	1922 Ag	Ithaca
Gold, Harry	1919 A 1922 M.D. (N. Y. C.)	Schenectady
Goldbaum, Jesse Morris	1919 A	Brooklyn
Goldberg, Elias	1920 A	Petrograd, Russia
†Goldberg, Emil	1921 A	Brooklyn
Goldberg, Jacob, B.A.	1922 M.D. (N. Y. C.)	New York City
†Goldberg, Lawrence Theodore	1922 A (Chem)	New York City
Goldberg, Samuel	1919 Ag	Brooklyn
†Goldberg, William	1920 A (Chem)	Detroit, Mich.
Goldman, Meyer	1920 Ag	Ithaca
Goldowitz, George	1922 A (Chem)	Port Chester
†Goldowitz, Herman Nathan	1921 L	Port Chester
Goldsmith, Harold Ellsworth	1922 A (Chem)	Mecklenburg
Goldsmith, Irwin	1921 A	New York City
†Goldstein, Harry Judah	1921 A	Brooklyn
Goldstein, Lemuel Caro, A.B.	1921 M.D. (N. Y. C.)	New York City
Goldstein, Reita Marion	1922 Ag	Brooklyn
Goldstein, Samuel William	1922 Ag	Brooklyn
†Goldstein, William	1921 Ag	Brooklyn
Goltz, Hilda Lee	1921 Ag	Buffalo
†Good, Herbert Franklin	1921 M	Dayton, Ohio
†Goodwin, Arthur Edward	1923 M	East Rochester
†Gordon, James Rufus	1919 A	Chappaqua
†Gordon, Myron Alexander	1921 A	Sharon Springs
Gorham, Alexander Campbell, B.S.A.	Grad	New York City
†Gorman, Clarence John	1921 L	Pulaski
Gorton, Raymond Vaughn	1919 V	Binghamton
Gotthoffer, Nathan	1922 A (Chem)	New York City
†Gottschalk, Louis	1919 A Grad	Brooklyn
†Gould, Alan Jenks	1921 Ag	Elmira
†Gould, Dewitt Clinton	1920 Ag	Newark
†Gove, Richard Everest	1920 A	Peru
†Graham, Benjamin Sanborn	1921 A	Brooklyn
†Grahm, Paul Serfass	1921 Ag	Albany
†Grant, Alfred Lawrence	1922 L	Newport
†Grant, George Curtis	1922 A	Akron, Ohio
Granville, Grace Madaline	1919 A	Ithaca
Grasselli, Caesar Augustin, 2d	1922 A (Chem)	Cleveland, Ohio
†Graves, William Brooke	1921 A	Gouverneur

Gray, Laura Winifred	1919 A	
†Gray, Lindsley Shepard	1921 Ag	North Troy
†Gray, Russell Warren	1921 Ag	Plano, Ill.
Green, Andrew Haswell	1919 Ag	Greene
Green, Eustace Edward, jr.	1919 Ag	Chicago, Ill.
†Green, John Dismukes	1922 A	Macon, Ga.
Green, Leonard Sanford	1922 L	New York City
†Green, Stephen Sanford	1923 M	New Rochelle
†Green, Watson Seymour	1922 M	Buffalo
Greenawalt, Hilda Louise	1919 Ag	Geneva
Greenawalt, Irma Maye	1921 Ag	Denver, Colo.
Greenbaum, Samuel Henry	1922 L	Denver, Colo.
†Greenberg, Herman	1922 M	Brooklyn
†Greenburg, Charles Isadore	1920 C	Bay Shore
†Greene, Earl Nathaniel	1922 A	Myerstown, Pa.
†Greene, Lewis	1920 A (Chem)	Oakfield
†Greene, Robert William	1923 M	Brooklyn
†Greene, Samuel Charles	1919 C	Canton, Pa.
†Greenspoon, William	1922 Ag	Brooklyn
Griffin, Clement Leroux	1920 A (Chem)	Brooklyn
Griffin, Frank Alexander	1920 A (Chem)	Stamford, Conn.
†Griffin, Harold Weeks	1923 C	Stamford, Conn.
Griffin, Mary Hulda	1920 Ag	Fleischmanns
Griffith, Randolph Chalker	1919 A	Richmond Hill
Griffiths, Jeanne May	1921 Ag	Dunnellon, Fla.
†Griscom, Samuel Bettie	1923 M	Union Springs
†Griswold, Arthur Stewart	1921 M	Salem, N. J.
Griswold, Frances Louise	1922 Ag	Rocky Hill, Conn.
Griswold, Grace Hall	Grad	Ithaca
Groff, Benjamin, B.S.	1922 M.D. (N. Y. C.)	Grand Rapids, Mich.
†Grossfeld, Louis	1922 A	New York City
†Grove, J. Nelson	1921 A (Chem)	College Point
Guernsey, Dorothy Frances	1921 Ag	Williamsville
†Guest, Wesley Tate	1921 M	Cobleskill
Guilbeau, Lillian Marie	Sp A	Silver Creek
†Guile, Harold Bush	1921 Ag	Lafayette, La.
Guiles, Marion Hitchcox	1920 Ag	Utica
Guion, Imogene	1922 A	Elmira
Gumaer, George Stuart	1921 A	Seneca Falls
Gunderman, Clarence R.	1923 M	Weedsport
†Gurwitz, Benjamin Harrison	1920 A	Bath
Gustafson, Axel Ferdinand, B.S., M.S.	Grad	Elmhurst
Gustin, Daniel Snyder	1919 A (Chem)	Aledo, Ill.
Gutierrez y Sanchez, Raul	1921 M	Johnstown
Gutwillig, William Stern	1922 A	Havana, Cuba
†Guyer, Jesse Alvah	1922 A (Chem)	Far Rockaway
Gwyn, Lewis Ruffner, jr.	1922 M	La Salle
		Buffalo
†Hadaway, William Stratton	1920 M	Montgomery
†Hagen, Dewey Admiral	1922 A (Chem)	Batavia
Haigler, Stanwood Wise, B.S.	1919 V	Cameron, S. C.
Haines, George, B.S.A., M.S.A.	Grad	New Rochelle
Haines, Mary Troth, B.A.	1919 Ag	Moorestown, N. J.
Hainsworth, Ellarene Lucille D.	1922 A	Gloversville
†Hale, Charles Brockway	1920 A	Herkimer
†Hale, Winfield	1922 M	Los Angeles, Cal.
†Haley, Francis Ambrose	1919 C	Watertown
Hall, Agnes Nelson	1921 A	Lockport
Hall, Gladys Marie	1920 Ag	Oneida
Hall, Hazel Jean	1919 A	Ridgway, Pa.
Hallback, Carin Maria	1922 A	New York City
†Haller, Casper Paul	1921 M	Herkimer
†Halperin, Herman	1920 M	Hamilton, Ohio
†Halstead, Arvalan Allen	1923 M	Auburn
†Ham, Eugene, jr.	1920 Ag	Verbank
Hamblen, Lucy Malinda	1919 A	Castile
Hambleton, Herbert James	1923 C	Buffalo
Hamburger, Louise Margaret	1919 Ag	White Plains
Hamilton, Carson Crandall	1922 A	Warrensburgh
†Hamilton, Charles Maynard	1922 Ag	South Hadley, Mass.
Hammond, Howard James	Sp Ag	Corry, Pa.
†Hammond, Maynard Charles	1919 Ag	Port Jervis
†Hammond, Reginald Gower	1920 M	Chicago, Ill.
†Hancock, Alfred Graham	1920 Ag	Hamburg
†Hankins, Francis William	1919 M	Auburn
Hanks, Arthur Herman	1922 A	Dunkirk
†Hanlon, Walter Gerard	1920 A	Stapleton
Hanselman, George Raymond	1922 M	Dunkirk
†Hanson, Leonard Christopher	1922 M	Veblen, S. Dak.
Hansson, Kristian Gosta	1920 A	Ithaca
Harber, Abraham Roscoe, B.S.	1920 M.D. (N. Y. C.)	New York

Harbers, Helene Gerda	1919 A	Brooklyn
Hard, Florence Elizabeth	1922 A	Flushing
†Hardy, John Everett	1920 A	Oil City, Pa.
†Haring, Delos Walker	1921 A	Buffalo
†Harkness, Donald Daniel	1922 Ag	Elba
Harmon, Hazel	1920 Ag	Meriden, Conn.
†Harmon, Glenn Douglas	1921 V	Savannah
†Harney, Charles Harrison	1922 A (Chem)	Lexington, Ky.
†Harp, Peter Hayt	1923 M	New Paltz
†Harpster, James Neff	1922 A	Freeport, Ill.
†Harrington, Francis Louis	1922 M	Buffalo
†Harrington, Harold Ray	1921 C	Utica
Harrington, Howard Lewis	1922 M	Niagara Falls
†Harrington, Norman Spencer	1921 M	Elizabeth, N. J.
†Harrington, Richard John	1923 C	Holyoke, Mass.
Harris, Charlotte	1921 Ag	Warsaw
Harris, Dorothy Margaret	1919 A	Ithaca
†Harris, Goodwin Read	1922 A	East Toronto, Can.
Harris, Katharine Wyckoff	1922 Ag	Hackensack, N. J.
Harris, Leon	1922 M	Hartford, Conn.
Harris, Marjorie Silliman, B.A.	Grad	Wethersfield, Conn.
Harris, Meyer Mathew, B.S.	1920 M.D. (N. Y. C.)	New York City
†Harrison, Bernard James	1920 C	Brooklyn
Harrison, Ethel Ray	1920 A	Philadelphia, Pa.
†Harrison, Galen Butts	1920 Ag	Oneonta
†Hart, Paul Richmond	1922 A	Franklin, Pa.
†Harter, Eugene Brewster	1923 M	Brooklyn
†Hartman, Henry Eugene	1919 Ag	New York City
Hartman, Scott Woodring	1920 Ag	Sayre, Pa.
†Hartmayer, Herbert William Keating	1920 C	Buffalo
†Hartt, Harold Arthur	1920 A (Chem)	Ravena
Hartzell, Corinne	1919 A	Buffalo
Harvey, Lillian Glennys	1921 A	Ithaca
†Harvey, Thomas Raht	1921 A	Denver, Colo.
†Hasselbeck, Eugene Joseph	1919 A (Chem)	Buffalo
Hatch, Arthur William	1921 A	New York City
Hatz, Bernard	1921 A (Chem)	Brooklyn
Hauser, Edwin Toal	1922 M.D. (N. Y. C.)	New York City
Hausman, Ethel Hinckley	1920 Ag	Ithaca
Hausman, Leon Augustus, B.A., M.A.	Grad	Ithaca
†Hausman, Max	1922 A	New York City
Havelin, Julius	1922 C	New York City
†Havey, Joseph Perry	1920 M	Yonkers
†Haviland, Harold Walter	1923 M	Fort Ann
†Hawley, George Newton	1922 A	Custer City, Pa.
Hawley, Lily	1919 A	Brooklyn
†Haydock, Walter Howe	1921 A	New York City
†Hayes, George DeNise	1920 C	Olean
†Hayes, William Kenneth	1922 Ag	Chappaqua
†Hayner, George Arthur	1922 M	Dayton, Ohio
Hays, Charles Hodge, jr.	1922 M	North East, Pa.
Hays, James Solomon	1922 L	New Rochelle
†Hayward, Harold Glenwood	1922 A (Chem)	Silver Creek
Hazen, Christina	1920 A	Ithaca
Hazlett, Robert Wilbur	1921 M	Wheeling, W. Va.
Hazzard, Gertrude Curtis	1921 A	Hancock
†Hazzard, Lawrence Stephen	1922 L	Yonkers
Healey, Lolita Evelyn, A.B.	Grad	Ithaca
†Healy, Joel Watres	1922 M	Scranton
†Heard, Randolph Alfred	1921 Ag	Ithaca
†Hearn, John Byron	1923 C	Port Byron
Heath, Elfreda Curtis	1920 A	Green Island
†Heath, Morgan Lewis	1921 M	Jamestown
†Heath, William Russell	1922 M	Hamburg
†Hebert, Walter Jones	1921 L	Hot Springs, Ark.
†Hedberg, Oren	1922 M	Ithaca
Hedcock, Elaine Ruth	1920 A	Takoma Park, D. C.
Hedger, George Andrews, A.B.	Grad	Salt Lake City, Utah
Heertje, Jeanette	1919 A	New York City
Heller, Anna	1921 A	New York City
Heller, Mary Elizabeth	1922 A	Williamsport, Pa.
†Hellstrom, Albert Nils	1923 M	Carbondale, Pa.
†Helms, Orland Edward	1920 V	Randolph
†Hemingway, William Riley	1922 Ag	Freeville
†Hemmer, Andrew Joseph	1920 A (Chem)	Syracuse
Hemphill, Raymond John	1919 A (Chem)	Jamestown
Henderson, Lulu Elsie	1921 A	Kerhonkson
†Hendrickson, John Bertram	1921 M	Ridgewood, N. J.
†Hendrie, Charles Francis	1919 M	Brooklyn
†Hendryx, Dwight Bushnell	1920 M	Ithaca
Hendryx, Harriet Evelyn	1920 Ag	Ithaca

†Hengerer, Howard Betts	1922 M	East Orange, N. J.
†Henigbaum, William Klemm	1919 M	Davenport, Iowa
Henkle, Curran Winslow	1922 M	Chicago, Ill.
Henry, Frank Charles, jr., A.B.	1921 M.D. (N. Y. C.)	Perth Amboy, N. J.
Henry, Sadie Elsie	1919 A	Brooklyn
†Henry, Walter Leon	1923 M	Canandaigua
†Hequembourg, Edward Grant	1921 M	Washington, D. C.
Herben, George Foster, B.S.	1921 M.D. (N. Y. C.)	Westfield, N. J.
†Herbert, Paul Anthony	1921 Ag	New York City
†Herd, Richard George	1922 C	Buffalo
Herman, Abbott Philip	1919 C	Brooklyn
Hermann, Charles Edward	1921 C	St. Louis, Mo.
Hernandez-Orpi, Enrique	1919 C	Camajuani, Cuba
†Herr, Walter Frederick	1921 Ag	New York City
Herrick, Gladys Ethel	1920 Ag	Tunkhannock, Pa.
†Herrick, Marvin Theodore	1921 A	Ithaca
†Herrington, Wilson Andrew	1919 Ag	Ellisville, Miss.
Herzig, Alfred Sebastian	1921 Ag	Brooklyn
Hess, Helen Marguerite	1920 Ag	Lyons Falls
†Hettinger, Harold Ingersoll	1920 C	Freeport, Ill.
†Hickey, Frank Joseph	1923 M	Brooklyn
†Hickey, James Francis	1921 A	Ithaca
Hieber, Dorothy Barbara	1920 A	Utica
Hieber, Evelyn Margaret Caroline, A.B.	Grad	Utica
†Hieber, John Theodore	1922 A (Chem)	Utica
†Higgins, Charles Wilcox	1921 L	Montezuma
†Hildreth, Wallace Leland	1922 Ag	Bridge Hampton
Hill, Boyd Tinsley	1920 Ar	Freeport, Ill.
†Hill, George Anthony	1922 M	Sayre, Pa.
†Hill, Henry Knox	1922 M	Kingston, Canada
Hill, Irene Marguerite	1922 A	Pleasantville
†Hill, Leland Halsey	1921 M	Ozone Park
†Hill, William Holcombe	1921 M	Hopewell, N. J.
Hillas, James Garniss	1919 Ag	West Hoboken, N. J.
Hillidge, Marcia Marie	1920 Ag	Front Royal, Va.
Hillidge, Ruth Snyder	1922 Ag	Front Royal, Va.
Hilmer, Hermann, A.B., A.M., Ph.D.	Grad	Ithaca
Himrich, Harold Edwin, B.S.	1919 M.D. (N. Y. C.)	New York City
†Hinrichs, Albert Ford	1920 A (Chem)	Glen Ridge, N. J.
†Hinrichs, Frederick	1922 M	Milwaukee, Wis.
Hinsdale, Ira Alfred, Ph.B.	1919 M.D. (N. Y. C.)	Camillus
†Hirsch, Emanuel	1920 C	Amityville
†Hirsch, Eric Donald	1921 A	Memphis, Tenn.
†Hirschberg, Leon Frederick	1920 A (Chem)	Brooklyn
†Hirsh, Ben Walter, jr.	1920 A	Memphis, Tenn.
†Hiscock, George Singleton	1919 C	Southampton
Hitchcock, Deborah Victoria	1921 A	Philadelphia, Pa.
†Hitchcock, Raymond Owen	1920 A	Lyons
Ho, Yun Huang, B.A.	Grad	Wuchang, China
†Hoagland, Donald	1920 Ag	Bridgeton, N. J.
Hochman, Samuel	1922 M.D. (N. Y. C.)	New York City
Hoddick, Julia Ida	1922 Ag	Buffalo
†Hodgins, Eric Francis	1922 M	New York City
†Hodgkinson, Francis Piercy	1921 M	Pittsburgh, Pa.
†Hoerle, John Miller	1921 M	Brooklyn
†Hoffeller, Neville Kaiser	1920 C	Buffalo
Hoffman, Eugenie Isabella	1922 Ag	Brooklyn
Hoffman, Israel Kenneth	1921 M.D. (N. Y. C.)	Passaic, N. J.
†Hoffman, Jacob	1922 C	New York City
Hoffman, Phoebe Doris, A.B.	1920 M.D. (N. Y. C.)	Bloomington, Ind.
Hogan, Agnes Cecilia, B.S.	Grad	New York City
Hoisington, Louis Benjamin, B.A.	Grad	Ithaca
Holbrook, John Knight, jr.	1920 A	Ithaca
Holderman, William Frederick	1921 Ag	New York City
†Hollis, Howard Coonley	1922 A	New London, N. H.
Hollis, William Carroll	1921 Ag	New York City
Holman, Wilgus Alexander	1922 M.D. (N. Y. C.)	Newark, N. J.
Holmes, Consuelo	1922 A	Bloomington, Ill.
†Holmes, Percy Robert	1920 M	Warwick
†Holmes, Willard Lewis	1923 M	Idaho Falls, Idaho
†Holmquist, Bernie Olaf	1922 A	Omaha, Nebr.
Holsapple, Alethe Alida	1919 A	New York City
†Holzberger, Walter Scott	1921 A (Chem)	Hamilton, Ohio
Hood, Thomas Stanley	1921 C	Indianapolis, Ind.
†Hooker, Russell Olin	1920 A	Watertown
†Hoover, Judson Rexford	1923 M	Elmira
†Hopf, John, jr.	1922 Ag	Spring Valley
Hopkins, Alice Mary	1921 A	New Hartford
†Hopkins, Willard Douglas	1920 Ag	Youngstown
†Hopper, Bernard Ewing	1922 A	Ridgewood, N. J.
Horend, Charles William, jr.	1922 A (Chem)	Binghamton

Horowitz, Grace Fannie	1922 A	New Rochelle
†Horrell, Stephen Byrd	1921 M	Pasadena, Cal.
†Horrnann, August Curt William	1921 A	Tompkinsville
†Horton, Edward Kenneth	1921 A	Whitehall
Hosenfeld, Marcus Nicholas	1923 M	Pittsburgh, Pa.
Hoskins, Frederick Martin	1919 L	Lyons Falls
Hoskins, Harry Stewart Lee	1922 C	Glenbrook, Conn.
Hosmer, Harriet, A.B.	1921 M.D. (N. Y. C.)	Buffalo
Hotchkiss, Edna Ruth	1919 A	Ithaca
Hou, Chia Yuen, A.T.E.C.	Grad	Soochow, China
Houck, Isabel Ruth	1922 A	Buffalo
Houck, Norman Lee Grand	1923 C	Weehawken, N. J.
†Houck, Robert Charles	1920 A (Chem)	Honeoye Falls
†Hough, Floyd Woodworth	1919 C	Athens
†Hough, Marshall Lewis	1922 M	Williamsport, Pa.
Houghton, Paul Roswell	1919 V	Fine View
†Houghton, William McKinley	1919 Ag	Oneonta
†Houston, Ira Harold	1920 Ag	Goshen
Howard, Edwin Laclede	1919 Ar	Ithaca
†Howard, Edwin Lawrence	1920 Ag	Youngstown
†Howard, Sullivan Eugene	1922 Ag	Holley
†Howe, Donald Atkins	1922 Ag	Yonkers
†Howell, Chester Everts	1922 M	Elmira
Howell, Clara Bower	1921 Ag	Ludlowville
Howell, Emma Louise	Sp Ag	Tarboro, N. C.
Howell, Helen Ilse	1922 A	Ithaca
†Howell, Howard Linford	1922 Ag 1923 C	Burdett
Howell, Luana Pauline	1922 A	Corning
†Howell, William Lester	1923 M	Watkins
†Howlett, Freeman Smith	1921 Ag	Knowlesville
Hoy, David Fletcher, jr.	1922 M	Ithaca
Hoyt, Mary Katherine	1921 A	Cohocton
Hsu, Shih-ta, B.S. in C.E.	Grad	Shaoling, China
†Hubbard, Frederick William	1923 M	Elmira
Hubbs, Hazlett David	1922 M	Amsterdam
†Huber, Walter Gundlach	1919 A	New York City
†Hudgins, Houlder	1922 A (Chem)	New York City
Hudson, Harriet Emery	1922 Ag	Fulton
†Huestis, John Phelps	1921 M	Greencastle, Ind.
†Huestis, Thomas Bunting	1919 M	Greencastle, Ind.
Huff, Fleta Wenona	1921 Ag	Ithaca
†Hugger, Albert Joseph	1921 C	Ridgewood
Hughes, Gertrude	1920 Ag	Ithaca
†Hughes, John Ackerman	1921 A	Ridgewood, N. J.
†Hughes, Peter Francis, jr.	1922 M	Perth Amboy, N. J.
Huie, Helen	1920 A	New York City
Hull, William Carey, jr.	1922 M	Tupper Lake
†Hundley, John Walker	1922 M	Granville, Ohio
Hunt, Isaac Burton, M.D.	Sp M.D. (N. Y. C.)	Washington, D. C.
†Hunt, John Bartlett	1921 Ag	Unadilla
Hunter, Edgerton Kaye	1920 Ar	Detroit, Mich.
Hunter, John Charlton	1920 Ag	Fulton
Huntington, Grace Evelyn	1922 Ag	Ithaca
†Hurst, Elmer Travis	1921 M	Wyoming
Huschke, Henry Albert Ralph	1922 Ag	Hurleyville
Huston, Lois Anna	1922 A	Three Springs, Pa.
†Hutchings, William Henry Bradfield	1922 A (Chem)	North Chili
Hutoryansky, Godel, B.S.	1921 M.D. (N. Y. C.)	New York City
†Huyck, Ralph Slater	1923 C	Hambletville
Hyatt, James Mead, A.B.	Grad	Owego
†Hyer, Clarence Raymond	1923 C	Mount Upton
Hyslop, George Hall, A.B., A.M.	1919 M.D. (N. Y. C.)	New York City
Ignatiev, Olga Bervy	1919 Ag	New York City
†Iler, Russell Hills	1920 A	Brooklyn
†Imlay, Robert	1919 A	Niagara Falls
Imperato, Pasquale Joseph, jr., B.S.	1921 M.D. (N. Y. C.)	Brooklyn
†Infanger, Adloph Omega	1919 C	Brooklyn
†Ingham, Walter Leland	1921 M	Pittsburgh, Pa.
Irish, Marian Louise	1920 A	Auburn
Irish, Ruth Frances	1922 Ag	Auburn
†Irish, Shurly Russell	1919 M	Auburn
Ironmonger, Violet May	1919 A	Brooklyn
†Isbills, Edmond Geery	1920 L	Bayonne, N. J.
†Israel, Jacob Gerreson	1920 A	Tonawanda
Issarankura, Wongse	1921 Ag	Bangkok, Siam
†Itkowitz, Israel	1922 L	New York City
Jablonsky, Isidore William	1922 A	Brooklyn
†Jackson, George Andrew	1922 M	Huntington
Jackson, Howard Campbell, B.S., M.S.	Grad	Ithaca

Jackson, Stuart Deming, A.B.	Grad	Cincinnati, Ohio
† Jackson, William Edward	1922 A	Whitehall
Jackson, William Joseph, A.B.	1919 M.D. (N. Y. C.)	New York City
† Jacob, Silvester Arthur	1920 A	New York City
Jacobs, Frances Beatrice	1922 A	New York City
Jacobs, Miles Richard	1921 Ag	Ithaca
† Jacobson, Abraham Aaron	1923 M	Leonard Bridge, Conn.
Jacobstein, Ellison	1922 M	Rochester
Jacobstein, Robert Noah	1922 M	New York City
† Jaeger, Theodore Frederick	1920 A	Hartford, Conn.
† Jagger, Seth Ransom	1921 A (Chem)	Flushing
Jameson, Hugh Kernochan	1923 M	Titusville, Pa.
† Jampol, Max	1919 M	New York City
† Janes, Warham Whitney	1919 A	Rochester
Jaquish, Helen Louise	1922 A	Brooklyn
Jarka, Clement Alphonsus, A.B.	1921 M.D. (N. Y. C.)	Mt. Carmel, Pa.
Jelliffe, Winifred	1922 Ag	New York City
† Jennings, George Jackson	1922 A (Chem)	St. Louis, Mo.
Jennings, Stephenson	1923 M	Menominee, Mich.
Jepson, Mabel Sophie	1920 A	Buffalo
† Jerome, Forrest Clifford	1923 M	Ashtabula, Ohio
† Jester, Edgar Frederic	1922 Ag	Franklin
† Jewett, David William	1921 Ag	Skaneateles
† Jewett, Eugene Lyon	1922 A (Chem)	Fredonia
Joffe, Sara Jacqueline	1922 A	New York City
Joffrion, Doris Kernan, B.A.	Grad	Marksville, La.
John, Carl Frank	1922 M	Milwaukee, Wis.
Johns, Juanita Pearl	1922 A	Ithaca
† Johnson, Abraham Malone	1923 M	Chattanooga, Tenn.
† Johnson, Albert Mason	1923 M	Berwick, Pa.
Johnson, Alberta	1920 Ag	Old Westbury
† Johnson, Arthur Stillwell	1922 L	Woodside
Johnson, Carmen May	1922 Ag	Rushville
† Johnson, Clarence	1920 Ag	Canandaigua
† Johnson, Douglas Harold	1921 A (Chem)	New York City
Johnson, Elna Edwardine	1919 A	New York City
† Johnson, Hibbard Fiske	1922 A	Racine, Wis.
Johnson, Miriam Louise	1921 A	Bellefontaine, Ohio
† Johnson, Pickens	1922 A	Houston, Tex.
Johnson, Richard Monroe	1923 M	Berwick, Pa.
† Johnson, Robert Myron	1922 A (Chem)	Lockport
† Johnson, Roger Charles	1922 M	Canandaigua
Johnson, Tora Maria	Sp A	New York City
† Johnson, Wright	1923 M	Washington, D. C.
† Johnston, Edwin	1920 Ag	Cortland
Johnston, Helen, B.S.	1919 M.D. (N. Y. C.)	Columbus Junction, Idaho
Johnston, Roy C.	1920 V	Livingston Manor
† Jomo, Joseph	1922 C	Chrome, N. J.
Jones, Anna Gladys	1922 A	Mt. Washington, Md.
† Jones, Arthur Lee	1922 A (Chem)	Bradford, Pa.
† Jones, Leon Herber	1923 M	Seneca Castle
† Jones, Merton Wurke	1921 A	Ithaca
Jones, Naomi Cecelia	1920 Ag	Worcester
† Jones, Ralph Felber	1919 M	Red Wing, Minn.
† Jones, Silvanus Ellis	1923 M	Buffalo
† Jones, Warren Herbert	1921 M	Arverne
† Jones, William Paul	1922 A (Chem)	Sharon, Pa.
Joyce, Thomas Bernard	1920 M.D. (N. Y. C.)	Gardner, Mass.
† Kahn, Laskar	1921 L	Fueblo, Colo.
† Kaltenthaler, Henry Jacob, jr.	1919 M	Philadelphia, Pa.
Kaminski, Edith	1921 L	Philadelphia, Pa.
† Kammerer, Frederick Stanley	1921 M	Staten Island
† Kane, Francis Richard	1922 A (Chem)	Canastota
Kao, Hua	1922 M	Shanghai, China
† Kapinas, Philip	1921 A	Richmond Hill
† Kaplan, Benjamin	1922 Ag	Brooklyn
Kaplan, Martha	1920 A	Brooklyn
† Kaplan, Robert	1920 A (Chem)	Brooklyn
† Karg, William Ernest	1920 M	Mt. Holly, N. J.
Karnow, Aaron	1922 C	Brooklyn
† Karp, Theodore Burton	1920 A	Brooklyn
† Karpeles, Seymour Leopold	1922 A (Chem)	Newark, N. J.
Kastner, Alfred Eugene	1923 M	Flushing
Kaufman, Aaron	1919 A	Elizabeth, N. J.
Kaufman, Charles, B.S.	1921 M.D. (N. Y. C.)	Brooklyn
Kaufmann, Richard Kohns	1922 L	New York City
† Kaufman, Samuel	1919 C	New York City
† Kauffman, Abraham Louis	1922 A (Chem)	Massena
Kawamata, Takashi, B.S.	Grad	New York City
† Kay, Harry Rayburn	1922 A	Sheridan, Wyo.

Kayser, Reuben, B.S.	1922 M.D. (N. Y. C.)	New York City
†Keady, Howard Patrick	1921 L	Brooklyn
Keasbey, Louisa Edwina	1919 A	Morristown, N. J.
†Keeler, Clarence Raymond	1921 Ag	Malone
†Keenan, DeElbert Ernest	1922 A	Elmira
†Keers, George Malcolm	1922 Ag	Wilkesburg, Pa.
Keet, Julia Mildred	1919 Ag	Schuyler Falls
Keiper, Elisabeth	1921 A	Rochester
Kelchner, Sara Arabelle	1919 Ag	Annville, Pa.
†Keller, Harold Parker	1920 A	Buffalo
†Kelley, Franklin Joseph	1922 A (Chem)	Spencer
†Kelley, Gerald Louis	1923 M	Covington, Pa.
Kelley, Louise, A.B., M.A.	Grad	Franklin, N. H.
Kelly, Dolores Alberta	1922 Ag	Brooklyn
†Kelly, Emerson Crosby	1921 A	Fleischmanns
Kelsey, Alpha Mary	1919 A	Mecklenburg
Kelsey, Martha Townsend	1919 A	Mecklenburg
Kendall, William Morgan	1919 A	Buffalo
†Kenerson, Royal Stone	1922 Ag	Ithaca
Kennedy, Edward Kavanaugh	1922 A	Buffalo
†Kennedy, Harvey Thomas	1921 A (Chem)	East Rochester
Kennedy, James Arthur, A.B.	Grad	Ithaca
†Kennedy, John Harrison	1922 M	Buffalo
†Kennedy, Robert Charles	1922 C	East Rochester
†Kennedy, Thomas Reed	1922 M	Pittsburgh, Pa.
†Kenworthy, Clarence Sprague	1922 M	Liberty
Kephart, Barbara	1921 Ag	Ithaca
†Kessel, Marcel Hartwig	1921 A	Buffalo
Kessler, Henry Howard, A.B.	1919 M.D. (N. Y. C.)	Newark, N. J.
†Kessler, Raphael, 3d	1922 A (Chem)	Smethport, Pa.
†Kevelson, Max	1920 M	New York City
Kidder, Hazel Letitia	1922 Ag	Sherman
Kidwell, Avis Leone, A.B.	Grad	Lawrence, Kans.
†Kilborne, Charles Lucius	1920 Ag	Moravia
Kimball, Everett Cleveland	1923 M	Corning
†Kimball, Sylvester Dana	1922 M	Mt. Vernon
†Kimbell, James Fraser	1921 M	Los Angeles, Cal.
†Kincaid, Howard Gordon	1922 M	Boonton, N. J.
Kinde, Doris Alice	1920 Ag	Canandaigua
†King, Charles Harold	1920 A	Stockbridge
†King, Fred Gray	1921 V	Oriskany Falls
†King, Walter Gray, jr.	1921 A (Chem)	New York City
Kinney, Helen	1922 A	Brooklyn
Kinsel, Irene Dorothy	1920 A	Saratoga
Kinsey, Jennie	1922 A	Hempstead
Kinzinger, Margaret Alice	1919 A	Brooklyn
Kirk, Winifred, A.B.	1922 M.D.	Newark, N. J.
Kitchin, Gladys	1919 Ag	Salem
†Kittelberger, Raymond Wilbur	1922 L	Rochester
†Kittredge, Linus Emerson	1920 M	Lockport
†Klein, Charles	1921 A (Chem)	Rockaway Beach
Klein, David Nathaniel	1923 C	New York City
†Klein, Hyman	1920 A	Brooklyn
†Klein, Philip Lawrence	1922 Ag	Brooklyn
Klein, Sadie	1921 A	New York City
†Kline, Arnold Manuel	1920 A (Chem)	Hudson
†Kline, Emil	1920 A (Chem)	Hudson
†Klobasa, John Joseph	1922 Ag	Brooklyn
Klock, Ruth Vera	1922 Ag	Phoenix
†Kluger, Maurice E	1922 A	Wyoming, Pa.
Knapp, Dwight Rufus, A.B.	1921 M.D. (N. Y. C.)	Danbury, Conn.
†Knapp, Laurence Bernard	1922 Ag	Port Byron
Knapp, Margaret Collins	1919 A	Marcellus
Knapp, Robert Davidson	1919 Ag	Preble
†Knauss, Edwin	1920 M	Poughkeepsie
†Knauss, Walter Paul	1921 Ag	Poughkeepsie
†Knights, Milford Charles	1921 A	North Adams, Mass.
Knox Charles Webster	1921 Ag	Brooklyn
Kobuski, Agnes Marie	1920 A	Gloversville
Koch, Anna Elizabeth	Sp Ag	Warsaw
Koch, Catherine Elizabeth, B.S. A.M.	Grad	Warsaw
Koch, Dorothea	1920 L	New Dorp
†Koehler, John Henry August,	1921 C	Rockville Center
†Koehler, Milton Alphonse	1921 Ag	Lynbrook
†Kohl, Walter Fred	1921 Ag	North Tonawanda
†Kohler, Albert Huntress	1922 C	Wilkes-Barre, Pa.
Kohli, Chet Ram	1919 A (Chem)	Jammu, Kashmir, India
Koo, Nee-Sun, B.S.	Grad	Shanghai, China
Krahe, Herbert	1921 Ag	New York City
†Krahe, Lawrence Carl Rubsam	1921 Ag	New York City
†Krauskopf, Daniel Melvin	1920 L	New York City

†Krauss, William Ernest	1921 Ag	Brockport
†Kreinherder, Millard Robert	1922 A	Buffalo
Krentz, Edna Johana	1922 A	Buffalo
Kretschmer, Beatrice Elizabeth	1922 A	Demarest, N. J.
Krey, Genevieve Eleanor	1920 A	Brooklyn
Krieg, Edwin Holmes	1922 M	New York City
Kriegsman, Edwin	1922 A (Chem)	New York City
†Krogmann, John Henry William	1920 L	Brooklyn
†Kroin, Harry Esslier	1920 A	Brooklyn
Kroll, Stanley Perry	1922 M	Saginaw, Mich.
†Krug, Paul Smith	1922 M	Erie, Pa.
Kruger, Leola Josephine	1922 Ag	New York City
Kuehnert, Lucy Emma	1922 A	McDonald, Pa.
†Kuenn, Clarence Elmer	1923 M	Hamburg
†Kugeman, William Emil, jr.	1922 M	West Cornwall, Conn.
†Kuhn, George Henry	1922 M	Pittsburgh, Pa.
Kupfer, Max	1922 C	Brooklyn
†*Kurzman, Melville	1919 Ag	New York City
Kwaan, Hon-Kwong	1919 M	Hankow, China
Kwei, Ming-Sin	1921 M	Manila, P. I.
†Kwit, Morris	1921 Ag	Brooklyn
Kwong, Chao-Chi	1922 M	Kuyeh, Chihli, China
Laas, Aubrey Gilbert	1923 M	Whitesboro
Laborde, Salvatore	1922 M	Havana, Cuba
Lackmann, Luella Irene	1919 A	Troy
†Ladd, Era Amos	1919 A	Batavia
†Ladd, Tallman	1922 M	Ithaca
LaFrance, John	1922 V	Ithaca
LaGrange, DeWitt	1919 V	Schenectady
†Laidlaw, William King	1922 A	Ellicottville
Lake, Doris Frances	1921 Ag	Farmington, Maine
Lake, Francis Wilbur	1922 C	Buffalo
†Lake, Michael	1919 A 1922 M.D.	New York City
†Lallou, George Edward Spotz	1920 C	Philadelphia, Pa.
†Lamb, Joseph Condie	1922 Ag	New York City
LaMont, Mildred Flora	1920 Ag	Hemlock
Lamoureux, Mabel	1919 Ag	Ithaca
†Lamoureux, Vincent Branner	1920 C	Ithaca
†Lamprecht, Frederick	1922 A	Cleveland, Ohio
Landgraf, Dorothy Clark	1921 A	Sandusky, Ohio
Landy, Abraham, B.S.	1920 M.D. (N. Y. C.)	New York City
Lane, Edward William	1922 M	Genoa
Lane, Emily Angeline, B.S.	Grad	Lanes Mills, Pa.
Lane, Frederic Chapin	1921 A	Cambridge, Mass.
Lang, John Robert Andrew, jr.	1921 M.D. (N. Y. C.)	Mt. Vernon
Lang, Murray Albert	1922 L	New York City
Langdon, Helen Cornelia	1919 Ag	Utica
Lansdale, Mary Elizabeth	1921 A (Chem)	Plainfield, N. J.
†Lansing, Arthur Cornelius	1921 A (Chem)	Cambridge
†Lanz, Milton Haber	1922 A	Ossining
†Lape, Frederick Henry	1921 A (Chem)	Esperance
†Lapin, Joseph Harris	1920 A (Chem)	New York City
†Large, Edward Wilson	1920 A (Chem)	West Collingswood, N. J.
†Larkin, Alfred Joseph	1922 A	Ithaca
†Larkin, John Vincent	1920 Ar	Ithaca
Larkin, Naomi Anna	1922 A	Ithaca
Larrabee, Callie Ham, A.B.	1921 M.D. (N. Y. C.)	Frankfort, Me.
†Larrabee, James Farnham	1923 M	Binghamton
Lasater, Corinne	1922 A	Oklahoma City, Okla.
de Laski, Edgar Gustave, A.B.	Grad	Weehawken, N. J.
Lasky, Solomon	1922 M.D. (N. Y. C.)	New York City
Lason, Helen Jane	1920 A	Homer
Lathrop, Frances Ann	1921 Ag	Angelica
†Lathrop, William Hamilton	1921 Ag	Wayne, Pa.
†Latz, Lawrence Morris	1920 M	New Brighton
Lau, Kwai Cheuk	1919 A	Hong Kong, China
Lau, Lo Naam	1919 A	Hong Kong, China
†Laubengayer, Albert Washington	1921 A (Chem)	Schenectady
Laug, William Nicholas	1922 M	Croton-on-Hudson
Laughlin, John	1920 V	Akron
LaWare, John Henry	1919 Ag	New York City
Lawrence, Agnes Alberta	1919 Ag	Ithaca
Lawrence, Myrtle Irene	1921 Ag	Buffalo
†Lawrence, Walter Henry	1919 M	Corfu
†Lawson, Albert Edward	1921 M	Philadelphia, Pa.
†Lawson, Archie Nelson	1921 Ag	Brocton
†Lawson, Randolph	1922 M	Philadelphia, Pa.
Lazarus, Lillian Beatrice	1921 A	Brooklyn
†Lazo, Charles Arthur	1921 Ag	New York City
*†Leach, J. Gardner	1922 M	Toledo, Ohio

*Deceased.

Leary, Emma Brennan	1920 A	Auburn
Leary, Helen North	1922 A	Auburn
†Leber, Wendolin Randolph	1921 M	Woodbridge, N. J.
†Lechler, George Price	1922 Ag	Philadelphia, Pa.
†LeCluse, Eugene Francis	1921 M	Great Neck
Lederer, Marie Louise	1922 A	New York City
Lee, Alfred Chang, B.S. in C.E.	Grad	Shanghai, China
Lee, Dih Hoe, B.A., M.S.	Grad	Shanghai, China
Lee, Dih Yui, B.S.	Grad	Shanghai, China
Lee, Ruth Adeline	1921 Ag	Ellisburg
Lee, Walter Joseph	1922 M	Buffalo
Leffingwell, Dana Jackson	1922 A	Aurora
Leffler, David	1920 V	New York City
Legare, Ferdinanda Izlar	1922 Ag	Charlestown, S. C.
†Lehmann, Alvin Stanley	1921 C	Peoria, Ill.
†Leibman, Edwin Albert	1919 M	Brooklyn
†Leifer, Bernard	1921 A	Brooklyn
Leinbach, Arthur Miller	1922 A	Reading, Pa.
†Leinbach, Harold Miller	1921 Ag	Reading, Pa.
†Leinroth, Eugene Alfred	1919 M	Philadelphia, Pa.
†Leith, Donald Ethelbert	1920 Ag	New York City
†Lenahan, Edwin Joseph	1922 C	Buffalo
†Lendway, Joseph	1922 M	Buffalo
Leonard, Anna Mary	1919 Ag	Ithaca
Leonard, Marjorie	1919 Ag	Glendive, Mont.
Leonhardt, Anna Margaret	1920 A	Redwood
Leppart, John Culver	1919 A (Chem)	Utica
†Leshner, George Jacob	1923 C	Carbondale, Pa.
Lesser, Frederico Adolfo	1922 A (Chem)	Sound Beach, Conn.
†Lev, Joseph	1920 A (Chem)	Brooklyn
†Levene, Henry	1921 L	Binghamton
†Levene, Hyman Charles	1921 M	New York City
Levi, Olma Cohn	1921 A	Ithaca
Levin, Bessie	1920 A	Brooklyn
Levine, Joseph Milton	1919 A 1922 M.D. (N. Y. C.)	Brooklyn
Levine, Leon Isaac, B.S.	1922 M.D. (N. Y. C.)	New York City
Levy, Dorothy Franklin	1921 Ar	Philadelphia, Pa.
†Levy, Earl Elmer	1923 M	Rochester
Levy, Edward Harry, A.B.	1922 M.D. (N. Y. C.)	Yonkers
Levy, Elmer DeRoy	1922 M	Newark, N. J.
†Levy, Robert Goldsmith	1921 A	Wilkes-Barre, Pa.
†Levy, Robert Monroe	1922 C	Monroe
Lewi, Alexander Gilland	1923 M	Newark, N. J.
†Lewis, Benjamin F.	1921 M	Utica
Lewis, Edward Howard	1921 M	New York City
Lewis, Florence	1920 A	Auburn
†Lewis, Henry Steele	1922 A	Norfolk, Va.
†Lewis, Milton Tichenor	1922 Ag	Barneveld
†Lewis, Ross Crothers	1923 M	Chester, Pa.
Liang, Yin Nien, B.S.	Grad	Peking, China
Lichtman, Solomon Sidney	1921 M.D. (N. Y. C.)	New York City
Liddell, Howard Scott, A.B., A.M.	Grad	Erie, Pa.
Liebeskind, Morris	1921 C	New York City
Lieke, Richard	1919 Ag	New York City
†Lifschitz, Charles	1922 M	Arverne
Lightfoot, Anna Elizabeth	1921 A	Geneva
Lightfoot, Ruth Edith	1922 Ag	Geneva
†Ligon, Jaque Millard	1922 C	Waco, Texas
Lilienfeld, Leo	1921 A (Chem)	New York City
†Lilly, Edwin Milton	1922 Ag	Ridgewood, N. J.
†Lindberg, Harry Emil	1919 C	Buffalo
Linder, Mary Anna	1920 A	Syracuse
†Linnell, Herbert Harrington	1920 C	Manila, P. I.
†Linnell, Philip William	1921 C	Springfield, Mass.
†Linnewerth, Edwin Jacob	1922 A (Chem)	Weehawken, N. J.
†Lins, Everett Winfield	1920 Ag	New Brighton
Liotta, Salvatore	1922 Ag	Brooklyn
Lippitt, Maxwell Walthour	1920 A (Chem)	Wilmington, N. C.
Lipsky, Merrill David	1922 A	Somerville, Tenn.
†List, Carl Albert	1923 M	Hoboken, N. J.
†Little, Clarence Jacob	1922 Ag	Sussex, N. J.
†Little, Harold Falkner	1922 Ag	Woodhull
†Littlewood, William	1920 M	New York City
Liu, Cheng, Fang	1920 M	Shanghai, China
Liu, Chi-Sheng	1922 C	Shanghai, China
Liu, Jun-Sheng	1922 M	Shanghai, China
†Livermore, James Northrop	1922 M	Gowanda
Loeb, Sabina Miriam	1919 A	Philadelphia, Pa.
Loebel, Robert Osias, A.B.	1921 M.D. (N. Y. C.)	Brooklyn
†Loede, Frederick William, jr.	1919 Ag	New York City

†Loew, Alfred Jacob	1921 L	Floral Park
†Long, Julian Sax	1921 A	Wilkes-Barre, Pa.
†Long, Richard Lewis	1922 Ag	Charlemont, Mass.
Long, Russell Paul	1922 M	Watervliet
†Loomis, Amos Prescott	1922 C	Watertown
Loomis, Bernice Elizabeth	1920 A	Bainbridge
†Loope, Clarence	1922 V	Cortland
Lopinsky, Leonard	1923 C	New York City
†Lord, George Willis	1920 C	Evanston, Ill.
Lorenz, Douglas James	1922 Ar	Dayton, Ohio
Lorenz, Milton	1922 M	New York City
Losey, Kenneth Regnold	1923 C	Northport
Lotter, Link Michael	1920 A	Springville
Lotter, Lloyd Bernhardt	1921 A	Springville
Love, Louise Sirena	1922 A	Verona, N. J.
Loveland, Clara Nell	1922 Ag	Auburn
Lowe, William John	1923 M	Bainbridge
Lowensohn, Leah Lazar	1921 A	New York City
†Lowes, James Tracy	1921 C	Baltimore, Md.
†Lowman, Shepard Wetmore	1923 C	Cleveland, Ohio
Lowry, Fern	1919 A	Stillwater, Okla.
Lozovitsky, Meyer Joseph, A.B.	1919 M.D. (N. Y. C.)	New York City
Lu, Feng Shu, C.E.	Grad	Wusih, China
Lu, Yen Chih	1919 Ar	Shanghai, China
Lucas, Anna Vivian	1919 A	Hammonton, N. J.
Luce, Carrie	1919 Ag	Ithaca
Luce, Clark Colby	1922 A (Chem)	Glen Ridge, N. J.
†Luce, Laurence Edward	1919 M	Stratford, Conn.
Lucent, Santos Bellini, B.S.	1921 M.D. (N. Y. C.)	Hackensack, N. J.
Luckstone, Harold Charles	1919 A	New York City
†Ludewig, Edwin William Charles	1921 Ag	New York City
Ludlum, Charles Daniel	1922 M	Brooklyn
Lueder, Josephine Augusta	1919 A	Ithaca
†Luffman, Harold Wells	1922 Ag	Clyde
Lufkin, Harold Marshall	1920 A	Parkesburg, Pa.
Lukens, Earl Gibson, A.B.	Grad	Cowgill, Mo.
†Lumsden, David Victor	1921 Ag	Ithaca
Lumsden, George Quincey	1922 Ag	Ithaca
Lund, Robert Leathen	1922 M	St. Louis, Mo.
Lundbeck, Gustave Hilmer, jr.	1922 M	Brooklyn
†Luning, Henry Herman	1920 Ag	Brooklyn
Lurio, Meyer	1919 A	Brooklyn
Luscher, Ruth Margaret	1922 A	LeRoy
†Luster, Carl Alexander	1922 A	Duluth, Minn.
†Lustig, Harold Eugene	1921 A	New York City
Lybolt, Lillian Antoinette	1919 Ag	Port Jervis
†Lyford, Harry Burgh	1921 A	Rock Island, Ill.
Lynahan, Gertrude Mary	1922 Ag	Corning
†Lynch, James Henry, jr.	1919 C	Buffalo
†Lynch, Robert Angelo	1922 A (Chem)	Glens Falls
Lyon, John Lyttleton	1922 A	Ithaca
†Lyons, Charles Ernest	1922 M	Dansville
Ma, Yu Chi	1919 C	Liau-a-au, Amoy, China
†Maahs, Arthur John	1922 C	Erie, Pa.
Mabee, Jennie Elizabeth	1919 A 1922 M.D.	Ithaca
†Mabry, Arnem Ercell	1923 C	Jacksonville, Fla.
MacAdam, Janet Gregg	1921 A	Rome
†McAllister, Francis Joseph	1920 Ag	Ithaca
McAllister, Thomas Donald	1922 A	Ithaca
MacBain, Kathleen	1922 A	Closter, N. J.
†McBride, Frank	1921 V	Perry
McCabe, Anna Elizabeth	1921 A	Haverstraw
*McCann, William Irvine, B.S.	Grad	Frazesburg, Ohio
†McCarthy, George Harold	1920 M	New York City
McCartney, Marcia May	1920 A	Pleasant Plains, Ill.
†McCarty, James Wilson	1922 A	Lima, Ohio
†McClaran, Joseph Frederick	1922 M	Saltsburgh, Pa.
McClay, Edith Louise	1920 A	Summit, N. J.
†McClelland, Ralph Alexander	1921 L	Brooklyn
McCluer, John Walter Hill	1920 C	Franklinville
†McClure, Frederic Luce	1920 C	Ensley, Ala.
McClure, John Hunter	1919 C	Richmond Hill
†McConnell, Malcolm Rosebrook	1922 M	LaGrange, Ill.
McCooey, John Henry, jr.	1921 L	Brooklyn
McCormick, Gordon Randolph	1922 A (Chem)	Wilkes-Barre, Pa.
†McCowen, Asher Daugherty	1922 M	Louisville, Ky.
†McCoy, Charles Stickney	1921 V	Sussex, N. J.
†McCullough, Henry Geyer	1921 M	Brooklyn
McCune, Mary Gertrude, Litt.B.	Grad	Grove City, Pa.
†McCutcheon, William Allen	1923 M	Falconer

*Deceased.

†McDearmon, George Washington	1919 C	Newport, Ark.
†McDonald, Fred Lemuel	1921 Ag	Indianapolis, Ind.
†McDonell, Frank Williams	1919 M	High River, Alberta, Canada
†McElfresh, John Lister	1920 A (Chem)	Baltimore, Md.
†McEntee, Royal Hugh	1922 A	Bath
†McFadden, Thomas Joseph Aloysius	1921 A	West New Brighton
†McGahan, James Cornelius	1921 Ag	Troy
†McGavock, Gurdon Pendleton	1922 M	Max Meadows, Va.
†McGill, Byron Arthur	1922 M	Mendon
†McGrath, Francis Ignatius	1920 C	Stratford, Conn.
McGraw, Robert Bush, A.B.	1921 M.D. (N. Y. C.)	Ithaca
†MacInnes, Paul Alexander	1921 A (Chem)	Syracuse
McIntosh, Alexander Robert Dennistown	1922 M	Tuxedo Park
†MacIntosh, Archibald	1921 A	Ithaca
Mack, James Robert	1922 A (Chem)	Shelter Island
Mack, Lucy Marion Loveland	1919 A	Albion
MacKay, Katherine Florence	1922 A	Ithaca
†McKee, Edward Price	1923 C	Scranton, Pa.
†MacKellar, Gordon	1920 C	Hazleton, Pa.
†McKenney, Philip Everett	1922 C	Takoma Park, D. C.
MacKenzie, Edwin Gordon	1920 A	Millbrook
†McKenzie, James Donald	1922 M	Buffalo
†MacKenzie, William Donald	1922 M	Newark, N. J.
†Mackey, Joseph	1922 M	Tonawanda
†McKinney, George Edward	1922 Ag	Cortland
†McLain, Robert Per Lee	1922 A (Chem)	Massillon, Ohio
†McLaughlin, Willard John	1923 M	Corning
†McLean, True	1922 M	Staten Island
McLoughlin, Vincent	1920 C	New York City
McMillan, Catherine Elizabeth	1921 A	Delanson
McMillan, Marion	1922 A	Delanson
McMillan, William Benton	1922 M	Hinsdale, Ill.
McMullen, Eleanor Clara	1920 A	Buffalo
†McNally, James Curran	1922 M	Pittsburgh, Pa.
Macnaughton, Elizabeth, A.B.	1922 M.D.	Brookline, Mass.
McNicol, Jessie Bone	1919 A	New York City
McNicol, Margaret Bone	1922 Ag	New York City
†McNitt, Robert Louis	1920 Ag	Pulaski
McNulty, Edward Thomas	1923 M	Elm Grove, W. Va.
McNulty, Sarah Alice	1920 A	Buffalo
Macomber, Hugh Irwin, B.S.	Grad	Ithaca
†McPherson, Roger Davis	1921 Ar	Palmyra
McReynolds, Grace Eleanor, A.B.	Grad	Maryville, Tenn.
†McReynolds, Rex	1921 C	Waco, Texas
McRostie, Gordon Peter, B.S.A., M.S.A.	Grad	Ithaca
McSparren, Ruth	1920 A	Furniss, Pa.
†McSweeney, Edward Daniel	1922 Ag	Fulton
†McVean, Albert Robert Francis	1920 M	LeRoy
†Madden, William Francis	1921 C	Cortland
Madrinan, Rafael	1922 C	Cali, Canca, Colombia, S. A.
Magee, Edward Bergiss	1923 M	Buffalo
†Maher, William Campbell	1921 L	Cortland
†Maier, Edward Leonard	1921 C	Washington, D. C.
Maier, Edwin Thomas	1922 A (Chem)	Jersey City, N. J.
Maier, Otto Henry	1922 L	Boston, Mass.
Maier, Raymond William Richard	1920 Ag	Rochester
†Main, Amos LaVerne	1921 M	Myers
†Mallery, Lewis Bertrand	1920 Ag	Phelps
†Mallory, Edmund Thompson	1922 Ar	Saratoga Springs
†Maloney, John Mathew	1921 A	Brooklyn
Maloney, William Michael	1921 A	St. Paul, Minn.
Maltby, Lucy Mary	1921 Ag	Corning
†Manchee, Alleyne Willmott	1922 M	Newark, N. J.
Manchester, Robert Harold	1923 M	Merrifield
†Manchester, Wilbur Oscar	1921 C	Nassau
Mange, Winthrop Everett	1922 M	Ithaca
†Manning, Frank LeRoy	1919 Ag	Otisville
†Manwaring, Walter Owen	1922 A (Chem)	Midland Park, N. J.
†Mapes, Arthur Franklin	1922 Ag	Owego
Maples, John Wade	1923 M	Scottsboro, Ala.
Maran, Solomon	1922 Ag	Brooklyn
†Marcoglou, Aristides Sawas	1920 M	Candia, Crete, Greece
†Marcus, Stanley Joseph	1922 M	Pittston, Pa.
Marks, Maxwell Sandheimer	1922 A	Cincinnati, O.
†Markthaler, Leo Valentine	1920 M	Elmira
†Marsh, Alfred Henry	1923 M	Washington, D. C.
†Marsh, Frederick Howard Vermilyea	1920 A	Westfield, Pa.
Marsh, Helen Townsend	1921 Ag	Interlaken
Marsh, Herbert Edward	1920 V	New Milford, Conn.
†Marshall, Donald Emerson	1922 Ag	West Hoboken, N. J.
Martens, James Hart Curry	1921 C	Shrub Oak

Martin, Alice Couzens	1921 A	Yonkers
†Martin, Charles Ellison	1921 C	Rochester
Martin, Doris Pauline	1920 A	Holyoke, Mass.
Martin, John Ward	1919 C	Chicago, Ill.
†Martin Louis Charles	1922 M	Amityville
Martin, Martha Elizabeth	1921 A	Catskill
†Martin, Robert Fitz-Randolph	1922 Ag	Springfield, Mass.
Martin, Thomas Lysons, A.B.	Grad	American Fork, Utah
†Martin, Willis Elwin	1920 A (Chem)	Westfield
Martinez, Arthur	1922 C	Bogota, Colombia, S. A.
Martinez, Arturo, A.B.	1920 M.D. (N. Y. C.)	Mayaguez, P. R.
†Martwick, Irving Julius	1921 Ag	Brooklyn
†Marvin, Ira Huston	1921 A	Kingston, Pa.
Marx, Ellen Hedwig	1919 A	Newark, N. J.
†Marx, Walter	1920 A	Newark, N. J.
†Masius, Leonard Max	1920 L	New York City
Mason, Rodney	1921 A	Sacket Harbor
Master, Arthur Matthews, B.S.	1921 M.D. (N. Y. C.)	New York City
Mathews, Frances Iona	1921 Ag	Valois
†Mathewson, Lemuel	1922 M	Bath
†Matson, Richard McConnell	1921 M	Ithaca
†Mattoon, James Harris	1922 A (Chem)	Pittsfield, Mass.
†Matzke, David Ernst	1921 A	Ithaca
†Mauer, Jacob Clarence	1919 Ag	Long Island City
Maurer, Cyril John, A.B.	1922 M.D. (N. Y. C.)	New York City
Maurer, Marie Therese	1923 M	Paris, France
†Maurillo, Dominick Francis	1920 A	New York City
†Maxon, Frederick James	1922 L	Oswego
†Maxson, Clark Perdue	1921 M	Cleveland, Ohio
†Maxson, Lawrence Meredith, A.B.	Grad	Cooperstown
†May, Frederick Arthur	1920 A	Brooklyn
†May, George Herbert	1922 A (Chem)	Carbondale, Pa.
†Mayer, Kurt Arnold	1920 Ag	Brooklyn
Maynard, Franklin Purdy	1920 Ag	Stamford
Maynard, Kingsley Darwin, A.B.	1921 M.D. (N. Y. C.)	Roscoe
Mazurowiski, Bruno Casimir, A.B.	1919 M.D. (N. Y. C.)	Buffalo
†Mead, George Stephen Vaughn	1922 M	Mt. Vernon
Mead, Harvey Linwood, jr.	1923 M	New York City
Mead, Walter Russell, B.A.	1922 M.D. (N. Y. C.)	Geneva, Ohio
†Meadow, Jacob	1920 L	Paterson, N. J.
†Meal, William Guy	1923 M	Lockport
†Mears, Alvin Arthur	1921 Ag	Cleveland, Ohio
Meehan, Agnes Marie	1921 L	Troy
Meikle, John Donald	1920 Ag	Baltimore, Md.
Meisels, Harry	1922 Ag	Willseyville
Mekeel, Amy Grace, A.B.	Grad	Trumansburg
†Mereness, Kneeland Abram	1919 M	Sharon Springs
†Merker, Herman	1919 M	Milwaukee, Wis.
†Mero, Joseph Mero	1922 M	New York City
†Merrell, Seward Snow	1923 M	Syracuse
†Merrill, Harold Arthur	1922 M	Ithaca
Merrill, Raymond Nathaniel	1920 M	Springfield, Mass.
Merrill, Vivian Agnes	1920 Ag	Merrill
Merritt, Douglas Depuy	1919 Ag	Woodbourne
Merritt, Sara Royce	1922 Ag	Hartsdale
†Mertz, Gordon John	1920 M	Colden
†Merz, Harold Oscar	1922 A (Chem)	Newark, N. J.
†Meseroll, Walter Black	1921 Ag	Manasquan, N. J.
Mesick, Benjamin Schultz	1923 M	Claverack
Messinger, Edith Katherine	1919 Ag	Oakfield
†Messinger, John Milton	1920 A	Oakfield
†Metzger, Herman Arthur	1921 M	New York City
†Meyer, Alfred William	1921 V	West Shokan
Meyer, Helen Luise	1919 A	Marcy
Meyers, William Koontz, jr.	1922 A	Harrisburg, Pa.
Meyerson, Hyman	1919 A	New York City
Michelson, Benjamin Charles	1919 C	Washington, D. C.
†Middlehurst, Arthur Edward	1919 Ar	Vincennes, Ind.
Migas, Ona Maria	Sp Ag	Boston, Mass.
Migrdichian, Vartkes	1919 A	Rodosto, Turkey
†Miller, Abraham Eliot	1921 A (Chem)	New York City
†Miller, Allison Harter	1921 A	Kingston, Pa.
†Miller, Charles Karleton	1921 M	Rochester
Miller, Charles Marion	1919 M	Mayville
Miller, Charles Stern	1919 A 1922 M.D. (N. Y. C.)	Corona
Miller, Evelyn Harriet	1922 A	Corona
†Miller, Frank Edward, jr.	1922 C	Rochester, Pa.
†Miller, Hamlet Rae	1923 M	Moorheadville, Pa.
†Miller, Harold Edward	1922 M	Albany
Miller, Harold Frederic	1919 A 1922 M.D.	Seneca Falls

†Miller, Harold Gordon	1923 M	Homer
†Miller, Henry Rhorer	1919 Ag	Mamaroneck
Miller, Ina Catherine	1922 Ag	Ithaca
Miller, Iva Evelyn	1920 Ag	Alden
Miller, Laura, A.B.	1920 M.D. (N. Y. C.)	New York City
†Miller, Lewis Charles	1921 M	Ithaca
†Miller, Lewis William	1923 M	Oneonta
Miller, Mary Alida	1921 Ag	Warsaw
Miller, Mary Helen	1921 Ag	Ithaca
Miller, Prue Herzberg	1921 A	Philadelphia, Pa.
Miller, Stella Miriam	1920 M.D. (N. Y. C.)	West New York, N. J.
†Miller, Wayne Downing	1919 M	Meriden, Conn.
†Miller, William Harvey	1922 L	Bellerose
Mills, Adrian Morse	1920 V	Durhamville
Millspaugh, Annie Milne	1922 A	Brooklyn
†Milmoë, James DeLarg	1922 A	Canastota
Milmoë, Margaret Dorothea Patricia	1920 A	Canastota
Milstein, Samuel Harry	1920 A	Albany
†Minar, George Elliott	1922 L	Ithaca
†Minasian, George Talmage	1919 M	Glen Ridge, N. J.
†Miner, Harry George	1921 M	Louisville, Ky.
†Minick, William Leon, jr.	1921 M	Waynesboro, Pa.
Minturn, Marion Katherin	1921 Ag	Auburn
Mirick, Dorothy Howe	1919 A	New York City
Miscall, Leonard	1919 C	Albany
†Mish, Frank Winder, jr.	1921 A	Hagerstown, Md.
Mishnun, Eleanor	1922 A	New York City
Mitchell, Alice Pauline	1919 A	Ithaca
Mitchell, Dale Raymond	1921 A	Ithaca
Mitchell, Maxwell, B.S.	1920 M.D. (N. Y. C.)	New York City
†Mitchell, Robert Arthur	1921 Ar	Norfolk, Va.
†Mitnick, Israel Edward	1922 Ag	Brooklyn
Mittelman, Louis	1919 A (Chem)	Buffalo
†Moffat, David Halliday	1921 M	Denver, Colo.
Molinet, Enrique	1920 M	Delicias, Cuba
Molinet, Joaquin	1921 M	Chaporra, Cuba
Monahan, William Floyd	1922 A (Chem)	Johnstown
Monjo, Marguerite Eulalie	1919 A	Brooklyn
Monroe, Olive May	1920 Ag	Waverly
†Monroe, Roswell Miller	1922 V	Liberty
Montaldo, Eva	1922 Ag	Ithaca
Montero, Harry Ernest, B.S.	1920 M.D. (N. Y. C.)	Bloomfield, N. J.
Montfort, Ellis Lindsey	1920 V	Peruville
Montes, Carlos	1919 Ag	La Paz, Bolivia
Montgomery, Lois Elizabeth, A.B.	Grad	Warsaw
†Montgomery, Paul Ray	1922 Ag	New York City
Moore, Arthur Hale	1921 C	Lyndhurst, N. J.
†Moore, Dean Crawford	1919 A 1922 M.D.	Newark, N. J.
†Moore, Harold Henry	1919 A	Auburn
†Moore, John MacLeod	1921 A (Chem)	Fredonia
Moore, Mary Eastman	1920 Ag	Ithaca
Moore, Paul Frederick	1923 M	Watertown
†Moorhead, Douglas McCord	1922 Ag	Moorheadville, Pa.
†Moot, Edmund Northrup	1922 Ag	Richmondville
Moran, Mary Josephine	1922 A	Middletown
†Moran, William Joseph	1922 Ag	Waterbury, Conn.
Morgan, Carlton James	1920 V	Mohawk
†Morgan, Frederick John	1921 A (Chem)	Brooklyn
†Morgan, Godfrey, jr.	1922 M	Buffalo
Morgan, Mary Ives	1920 Ag	Ithaca
Morgan, Thomas Richard	1920 A	Gilberton, Pa.
Morris, Abraham M.	1923 C	New York City
†Morris, Benn Grandin	1921 M	Ithaca
Morris, Cora Hennen, A.B.	1920 M.D. (N. Y. C.)	New York City
†Morris, Donald Evan	1920 Ag	Rochester
Morris, Dora	1922 A	Amsterdam
†Morris, Galloway Cheston	1922 M	Lake George
Morris, Grace Evelyn	1922 A	Buffalo
Morris, Henry Gray, A.B.	1921 M.D. (N. Y. C.)	Jamestown
Morris, Isadore Ralph	1921 A	Akron, Ohio
†Morris, John Carless	1921 A	Sag Harbor
†Morris, Leland Charles, A.B.	Grad	Denver, Colo.
†Morrison, Harry	1921 C	Baltimore, Md.
†Morrison, Joseph Partridge	1922 Ag	Yonkers
Morrissey, Dorothy	1921 Ag	New York City
Morrow, Margaret Weir	1921 Ag	Ithaca
†Morse, Charles Walter	1920 A (Chem)	Amsterdam
Morse, Louis J., B.A.	1922 M.D. (N. Y. C.)	New York City
†Morson, William Taylor	1923 M	Brooklyn
†Moses, Howard Alfred	1922 A	Chicago, Ill.
Moses, Nathan	1922 L	New York City

† Mosher, Charles Hull	1922 M	Auburn
† Mosher, James Howell	1921 M	Atwater
Motycha, Joseph	1923 M	Utica
Muesebeck, Carl Frederick William, B.S.	Grad	Brockport
Muhlberger, Adolphus Joseph	1922 Ag	Johnstown
Mulford, Virgil Arthur	1922 M	Elizabeth, N. J.
Mulhern, Alice Wade, A.B.	Grad	St. Marys, Pa.
Mulhern, Grace Wade	1922 A (Chem)	St. Marys, Pa.
Mullaney, John Barry	1922 L	Corning
Muller, Mildred	1920 A	West Somerville, Mass.
† Muller, Richard	1921 M	New York City
† Mulvana, James Francis	1923 M	Bombay
Mundt, Bernice Waitz	1922 A	Oil City, Pa.
Munsell, Cornelia Adele	1920 Ag	New Hartford
† Munsick, George	1921 A	Maplewood, N. J.
† Muntz, William Emanuel	1921 A	Buffalo
† Murphy, Charles Hubert	1922 A	Urbana, Ohio
Murphy, Elsie Philippa	1922 A	Ithaca
Murphy, Helen Elizabeth, B.S.	Grad	Phoenix
† Murphy, Henry Penny	1920 L	Pawling
† Murphy, Robert William	1922 M	Phoenix
† Murray, Earl William	1922 A	McDonald, Pa.
Murray, Mary Isabel	1919 A	McDonald, Pa.
† Murray, William Colman	1921 A	Dunkirk
Mutchler, John Powell	1922 M	Washington, D. C.
† Muth, Frederick Jefferson	1921 A	Lititz, Pa.
Myers, Oscar	1921 A (Chem)	Hartford, Conn.
† Myers, Walter Chapman	1922 M	Ridgewood, N. J.
Myrick, Donald Wisner	1922 M	Brooklyn
Nachmani, Isaac, A.B.	1921 M.D. (N. Y. C.)	Rechobth, Palestine
Nanz, Ralph Simpson, B.S.	Grad	Ithaca
Nash, Naomi	1920 A	Ithaca
Nash, William Wray	1923 C	Brooklyn
† Navitsky, Leo Vincent	1922 Ar	Palmerton, Pa.
† Naylor, George Windsor	1922 A (Chem)	Stamford, Conn.
† Nazor, Howard Mussett	1922 L	Ashtabula, Ohio
Neal, Alice Heselton	1920 A	Philadelphia, Pa.
* Neale, Harold Edmund	1922 C	Brooklyn
† Neale, William Wallace	1921 M	Richmond, Va.
† Nealon, Edward Joseph	1921 Ag	Paterson
Nee, Wem Chin	1920 Ag	Foochow, China
† Need, Leslie Redver	1922 M	North Troy
† Needle, Joseph	1920 C	Charleston, S. C.
Neely, Elizabeth	1919 A	Philadelphia, Pa.
Nelson, Nathan Loeb	1919 Ag	Brooklyn
† Nelson, Samuel Herman	1919 L	Newark, N. J.
† * Nemser, Joseph William	1920 A (Chem)	New York City
Nerenstone, Samuel H., B.A.	1922 M.D. (N. Y. C.)	New York City
† Nesbit, Harry Roy	1923 M	Ransomville
† Neuhaus, Ralph	1919 M	Houston, Texas
† Newby, Arthur Brazil	1921 M	Acme, Texas
Newell, Esther	1922 A	Crafton, Pa.
Newman, Irving, B.A.	1922 M.D. (N. Y. C.)	New York City
† Newman, Lawrence Weddell	1923 M	Cleveland, Ohio
Newman, Ruth	1921 Ag	Churchville
† Newton, Samuel Marsden	1922 M	Dunkirk
Nichols, Melvin, B. (Chem)	Grad	Dayton, Ohio
† Nicholson, Harry Christopher	1922 A	Haverstraw
† Nicholson, James Starr	1921 C	Pittsburgh, Pa.
† Nicholson, Samuel Ralph	1922 M	Wilkes-Barre, Pa.
† Nickerson, Paul Urban	1923 C	Needham, Mass.
† Niedeck, J. Albert	1921 M	Ithaca
Nielsen, Harold Villers	1922 M	Plainfield, N. J.
† Nigrelli, James	1921 A	Peace Dale, R. I.
Nill, Frederick	1919 A (Chem)	Buffalo
Nirenberg, Harry Edward, A.B.	1921 M.D. (N. Y. C.)	Brooklyn
Noble, Clarence Vernon, B.S.	Grad	Ithaca
† Nolan, Humphrey	1921 Ar	Barnard
† Nordgren, Carl Wilhelm	1921 Ag	Schenectady
Northrop, Burdette Kibbe	1919 M	Tarpon Springs, Fla.
† Northrop, Floyd Lorrain	1920 Ag	Tarpon Springs, Fla.
Northrup, Ruth Winifred	1921 A	Homer
Northup, Olive Emelyn	1922 A	Ithaca
† Norton, Charles Erastus	1919 M	Byron
† Nostrand, Dudley Stephen	1920 A	New York City
† Nourse, Clair Prentiss	1919 A	Milwaukee, Wis.
† November, Nathan	1919 C	Brooklyn
† Nover, Barnet	1919 A	New York City
† Nuessle, Dwight Avery	1922 A	Onawa, Iowa
Nugent, Albert Edward	1921 M	Dunkirk
*† Nugent, Paul Fordham	1919 A 1922 M.D.	Southampton

*Deceased.

Nye, Ruth Hammond	1920 Ag	Auburn
Nygren, Alfred Magnus	1923 M	Freeport
†Oates, Francis John	1920 Ag	Greene
†Oberrender, John Stein	1922 A	Freeland, Pa.
†O'Brian, William Francis	1922 M	Oswego
O'Brien, Arthur Matthew	1922 A	Rochester
†O'Brien, Franklin Parsons	1919 A	Evanston, Ill.
O'Brien, Ruth Marie	1921 A	Port Leyden
†O'Brien, William Clyde	1921 L	Rochester
†O'Britis, Edward William	1923 C	Edwardsville, Pa.
Odell, Ruby May	1921 Ag	Hilton
†O'Donnell, Frederick Joseph	1922 L	Herkimer
Oelkers, Marita	1919 A	Brooklyn
O'Flaherty, Gertrude Irma	1921 A	Oil City, Pa.
†Ogden, Doward Weston	1923 C	Port Byron
Ogden, John Bennett	1922 M	Ithaca
O'Keefe, Paul Eugene	1922 L	Waterloo
†Okin, Alexander	1922 Ag	Brooklyn
O'Leary, Joseph Henry	1921 V	Cortland
†Olin, Spencer Truman	1921 M	Alton, Ill.
†Olney, Carl Weddigen	1922 A	Rutland, Vt.
Olsen, James	1922 A (Chem)	New York City
Olson, George	1919 M	Chicago, Ill.
O'Neill, Mary Alice	1922 A	Auburn
†Onstott, Virgil Samms	1921 C	Saltsburg, Pa.
†Ormsby, Hiram Kingsley, jr.	1922 M	Syracuse
O'Rourke, Lawrence James, B.A.	Grad	Appleton, Wis.
†Orr, Raymond Coughlin	1923 C	Brooklyn
†Ortner, Rudolph	1923 M	Frankfort
†Orvis, Paul Boyd	1922 V	Buffalo
†Osborne, Stuart Milton	1922 M	Oneida
†Oschrin, Leon	1922 M	Jersey City, N. J.
†O'Shaughnessy, James Joseph	1922 Ag	Owego
Oshrin, Henry	1922 A	Jersey City, N. J.
Osness, William Nathan	1922 Ag	Dayton, Ohio
Ostergren, Carl Fritiof	1921 M	Brooklyn
†Ostergren, Oscar Raynor	1920 M	Brooklyn
†Ostrander, Paul Duane	1921 M	Schuylerville
†Ostrom, Selden William	1921 A	Olean
†O'Sullivan, William Twiss	1922 Ar	New York City
Oteiza, Pable Benigno	1920 Ar	Cienfuegos, Cuba
†Otis, Philip Stewart	1922 M	Newburgh
Ottley, Frances Mabel	1920 A	Ithaca
†Ottley, Harvey Van Gelder	1923 M	Seneca Castle
Otto, Edward August	1922 M	Amsterdam
Outcalt, George Willard	1922 A (Chem)	Cincinnati, Ohio
†Overton, Hugh Warren	1922 C	Southampton
Overton, Warner Lawrence	1922 A	Westfield
†Oviatt, Clifford Reichel	1922 L	Danbury, Conn.
†Owen, Vincent Southworth	1922 M	Ithaca
†Owens, Norman	1922 A	Morristown, N. J.
Oxholm, Gustav Kielland, B.A.	1919 M.D. (N. Y. C.)	New York City
Ozaroff, Benjamin	1922 M	Brooklyn
†Packard, Sidney Alton	1920 A	Oklahoma City, Okla.
†Paddock, Arthur James	1921 V	Prattsburgh
†Paddon, William Wallace	1921 A (Chem)	Utica
†Page, Alan Howard	1922 M	Binghamton
†Page, Henry Nathaniel	1922 M	Perry
Page, Irvine Heinly	1921 A	Indianapolis, Ind.
†Paine, Louis Davis	1922 A	Toledo, Ohio
Paine, Raymond Antisdale	1923 M	Medina
†Painter, George Crawford	1922 M	Kittanning, Pa.
Palacio, Francisco Gomez, jr.	1921 Ar	Mexico City, Mex.
†Paley, Philip	1920 Ag	Brooklyn
Paley, Charles	1922 M.D. (N. Y. C.)	Brooklyn
†Palmer, Glenn Charles	1920 Ag	Oil City, Pa.
Palmer, Helen Elizabeth	1922 A (Chem)	Catskill
†Palmer, James Beckley	1921 A (Chem)	Oil City, Pa.
Palmer, Margaret Helen	1919 Ar	Grosse Ile, Mich.
Palmer, Roger Sherman, B.A.	1922 M.D. (N. Y. C.)	Pomona, Cal.
†Palmer, Thomas Somerville	1923 M	Newark, N. J.
Palomeque, Alonzo Ermilo	1922 M	Havana, Cuba
†Pancoast, Russell Thorne	1922 C	Miami Beach, Fla.
Pao, Kuo-Pao	1922 M	Shanghai, China
†Papke, William August	1919 A	New York City
Parbury, Caroline Marjorie	1921 Ag	New Rochelle
†Park, John Bothwell	1921 A	Horsham, Pa.
†Parke, Torsten Herbert	1919 M	Chicago, Ill.
†Parker, Sanford Ruby	1922 M	Madisonville, Ky.

Parker, Z. Rita, A.B.	1922 M.D.	Lakewood, N. J.
Parkhurst, Irving Wright	1922 A	Fair Haven, Vt.
Parks, Charles John, Ph.B.	Grad	Watkins
†Parks, Floyd Roswell	1921 A	Binghamton
†Parks, Wellington Edward	1919 V	Leeds
Parnell, Gilbert Smith	1922 L	Indiana, Pa.
Parrott, Martha Toscan	1922 Ag	Lake George
Parry, Beatrice Helen	1922 A	Carbondale, Pa.
†Parsell, Richard Kendrick	1921 A (Chem)	Ithaca
Parsons, Harriot Anne	1919 A	Buffalo
Pascual, Vincente Parungao	1922 C	Ayarat, Pampanga, P. I.
†Patterson, Frank	1921 Ag	New York City
Patton, Cuyler Shaw	1919 M	Akron, Ohio
Patton, Mabel Mary	1919 A	Gouverneur
Pavlicek, Frederick, jr.	1922 Ar	New York City
†Payne, Frank Ellsworth	1923 M	Indian Lake
†Peabody, Richard Hall	1921 Ag	White Plains
†Peare, Willard Chase	1919 M	Stamford, Conn.
Pease, Donald Linus	1920 V	Delhi
Pease, Rodney Wesson	1921 Ag	Buffalo
†Peck, Charles Gifford	1921 Ag	Phelps
Peck, Helen Edith	1922 A	Carbondale, Pa.
†Peckham, Felix Augustus	1922 M	Washington, D. C.
†Peer, Alfred James	1920 L	Deal Beach, N. J.
†Peer, Lyndon Arthur	1922 A	Deal Beach, N. J.
Pei, I-Hsiang, A. E. T. C.	Grad	Luchowfu, Anhui, China
Peifer, Carleton	1922 A	Shickshinny, Pa.
†Pellman, Arthur George	1921 A	Buffalo
†Peltz, Alfred David	1922 M	Newport News, Va.
Pendleton, Claude M.	1919 C	Port Dickinson
Pennock, Samuel Sellers, jr.	1922 A	Lansdowne, Pa.
Pereyo, Luis Jesus, jr.	1922 L	Humacao, P. R.
†Perlman, David	1919 C	Washington, D. C.
†Perrine, David Bates	1923 M	Centralia, Ill.
Perry, Beatrice Thomas	1921 Ag	North Franklin
Perry, Raymond Arnold, B.S.	Grad	Dundee
†Perry, Winston Churchill	1922 L	Nyack
†Pershing, Howell Terry, jr.	1921 A	Denver, Colo.
†Petermann, Fernando Barth	1923 M	Kearsarge, Mich.
Peters, George Hugo	1921 Ag	Brooklyn
†Peters, Russell Holt	1920 A	Omaha, Nebr.
†Peterson, Milton Laverne	1923 M	Spokane, Wash.
†Petherbridge, Harry	1923 M	Brooklyn
†Pfleger, Kenneth Warner	1921 A	Arlington, N. J.
Pfordte, Frederick Edgar	1919 Ag	Cairo
Pforr, Idella Hall	1921 L	Brooklyn
Pharo, Marian	1919 A	Philadelphia, Pa.
Phelan, Earl Walter	1921 A (Chem)	East Orange, N. J.
Phelan, Walter Francis, A.B.	1920 M.D. (N. Y. C.)	Yonkers
†Philipson, Robert Arnson	1919 C	Ossining
†Phillips, George Howe	1922 M	Cleveland, Ohio
Phillips, Harry Ashton, A.B., B.S.	Grad	Bates City, Mo.
Phillips, Isadore Joshua	1922 M	Rochester
†Phillips, Robert Conkling	1920 A	Port Jervis
Phipps, Emma Virginia	1919 Ag	Buffalo
†Phipps, Irving Rogers	1922 A (Chem)	Cortland
Phoutrides, Stephanos Evangelos, B.A.	1920 Ag	Saratoga Springs
Pickwick, Lambert Bishop	1922 Ar	Newark, N. J.
Pierce, Claire Edith	1919 A	Limerick
Pierce, Everett Washington	1921 Ag	Sidney
Pierson, Leona Lovisa	1922 A	Ithaca
Pile, Robert Francis	1922 A	New York City
Pincus, Barrett, B.S.	1920 M.D. (N. Y. C.)	New York City
†Pirnie, Miles David	1922 Ag	Pulaski
Pise, Eleanor Manwaring	1921 A	Goshen
†Pitcher, Joel Ketchum	1920 A	Freeport
†Plass, Edward Lorenzo	1920 Ag	Poughkeepsie
†Platt, Austin Blair	1922 M	Scranton, Pa.
Platt, Esther Mae	1922 A	Port Jefferson
†Platt, Joseph Curtis	1922 M	Scranton, Pa.
†Plummer, James Miner	1922 Ag	Mobile, Ala.
†Pogue, Webster Vinson	1922 M	Philadelphia, Pa.
†Polack, Waldemar	1921 C.	New York City
Pollack, Harry Louis	1921 A	New York City
†Pollard, George Fitz Randolph	1920 Ag	Chatham, N. J.
†Pooley, Robert Cecil	1920 A	Brooklyn
†Pope, Robert Whiddit	1922 C	Hasbrouck Heights, N. J.
†*Pope, William Henry	1922 M	Daytona, Fla.
Porter, Catherine Lucy	1919 A	Patterson
Porter, Francis Albert	1922 A (Chem)	Albion
†Porter, Joseph Henry	1921 Ag	Sag Harbor

*Deceased.

Porter, Lucy Du Bois, A.B.	1919 M.D. (N. Y. C.)	New York City
Porter, Mary Pullman	1922 A	New Rochelle
†Porter, Tyler Copeland	1921 M	Brookline, Mass.
†Potter, Harley Louis	1922 M	Aurora, Mo.
Potter, Helen Janette	1922 Ag	Collins
Potter, Mary Isabelle, B.S.	Grad	Farmington, Conn.
Potter, Olin Chester	1921 Ag	Collins
Potts, Abbie Findlay, A.B., A.M.	Grad	Troy
†Powell, Desmond Stevens	1920 A	Waverly
Powell, Dorothy Louise	1922 Ag	Norwood
Powell, Esther Hale	1922 A	Norwood
†Powell, John Edward	1922 M	Pittsburgh, Pa.
Powers, Placida Coronata	1922 A	Mt. Carmel, Pa.
Prangen, Evelyn	1920 A	Hornell
Pratt, Elizabeth	1922 Ag	Wellesley Hills, Mass.
†Pratt, Roy Ernest	1922 C	Franklinville
†Pregler, Anton Andrew	1920 C	Glenbrook, Conn.
†Prendergast, Walter Thomas	1922 A	Marion, Ohio
Preston, Frances	1919 Ag	Canton, Pa.
Preston, Gerald Lucius	1921 Ag	McDonough
†Preston, Kenneth Frank	1921 A	Binghamton
Preston, Melvin George	1922 A	Utica
†Pretat, Hamilton Grenelle	1923 M	Waterville, Conn.
†Previn, Siegfried	1920 M	New York City
†Prevosto, Alexander	1922 M	New York City
†Price, David Willard	1923 M	Frostburg, Md.
Pringle, Henry Fowles	1920 A	New York City
Pritchard, James George	1919 Ag	Ithaca
Pritchard, John Paul	1922 A	White Lake
†Prosch, Walter Richard	1922 M	Newark, N. J.
†Protzman, William Wilfred	1920 A	Brooklyn
†Prout, Curtis Tuttle	1921 A	Windham
Proux, Mildred Agatha	1921 A	Glens Falls
†Puder, Joseph Wilton	1921 M	Savannah, Ga.
†Puetz, Howard Dewey	1922 Ar	Lima, Ohio
Pujol, John B.	1921 C	Bolondion, Cuba
Pulsifer, Julia, A.B.	Grad	Auburn
†Purdy, Alvin Canfield	1920 A	Middletown
†Purdy, Donald MacLean	1921 A (Chem)	Ithaca
Purdy, Dorothy Winifred	1919 Ag	Ithaca
Purdy, Gladys Mary	1922 Ag	Ossining
Purdy, Helen Alice, A.B.	Grad	Croton-on-Hudson
†Purdy, Randall Brockner	1920 M	New York City
Putnam, Eleanor Rebecca	1922 Ag	Holland Patent
Puttick, Gail Ferguson B.S.	Grad	Wellington, Cape Colony, S. Africa
Quaif, Clara Ella	1921 A	Richfield Springs
Quail, Wallace Blanck	1919 M	Brooklyn
†Quail, Willard Earl	1922 Ag	Brooklyn
Quattlander, Stella Josephine	1921 A	Buffalo
Quel, Seymour Barnett	1922 A	New York City
†Quesal, Frank	1922 M	Yonkers
†Quick, Charles Herbert	1922 A (Chem)	Newton Centre, Mass.
Quick, Martha Edith	1920 Ag	Ithaca
Quick, Mary Adelia	Sp Ag	Ithaca
Quick, Roberta Winchell	1922 A	Ithaca
†Quimby, George Ellis	1921 Ar	Brooklyn
†Quinan, Wickham Hartzell	1920 M	Manila, P. I.
Quinby, Millicent Harriet	1919 Ag	Chappaqua
Quinlivan, Bernice Isabelle	1922 A	Corning
Quinn, Ethel Maurine	1922 A	Ithaca
†Rabi, Isidor Isaac	1920 A (Chem)	Brooklyn
Race, Chester Elwyn	1922 M	Greene
†Race, Hubert Hawley	1921 M	Buffalo
†Rackow, Mackey	1920 A	Spring Valley
†Raducziner, Joseph	1921 C	Rochester
†Rafferty, William James Francis	1922 C	Putnam, Conn.
†Raffloer, William Rudolph	1922 M	Ithaca
Raiva, Simha	1922 A	Cambridge, Mass.
†Ralph, Irving Clark	1922 M	Buffalo
†Ramsay, James Alexander	1921 A	Yonkers
†Rand, Gordon Willshire	1923 M	Brooklyn
Rand, Leighton Payson, A.B.	1921 M.D. (N. Y. C.)	Brooklyn
Rane, Fannie Coolbaugh, A.B.	Grad	Waban, Mass.
†Rankin, Edward Stevens, jr.	1920 A	Newark, N. J.
Ranno, Dwight Boutwell	1921 M	Ithaca
Raplee, Jay Wixson	1920 Ag	Ithaca
Rapley, William Washington	1922 Ag	Washington, D. C.
Rapp, Theodore George	1920 M	Delanco, N. J.
†Rasey, Harry Douglas	1923 M	Randolph

†Rasmussen, Myers Peter	1919 Ag	Melrose
Ratelle, Ruth May	1920 A	Glens Falls
Rathbone, John Atkinson	1921 V	Parkersburg, W. Va.
†Rathburn, Edward Taylor	1922 L	Toledo, Ohio
Rattner, Irving Ned	1922 M.D. (N. Y. C.)	New York City
Rattner, Solomon	1922 Ag	New York City
†Rawlins, Harold Mead	1921 A (Chem)	South Glens Falls
†Ray, Asaph E.	1922 A (Chem)	Unadilla
Ray, Jeannette Patricia	1922 A	New York City
Raymond, Lucia Bostwick	1919 A	Franklin
†Raynor, Hubert Smith	1921 A	Warwick
†Rebmann, Godfrey Ruhland, jr.	1919 M	Philadelphia, Pa.
†Recknagel, John Herman, 3d	1922 M	Brooklyn
†Reed, Allen Baldwin	1920 A (Chem)	Ithaca
†Reed, Franklin Andrew	1922 M	Buffalo
†Reed, Louis Jerome	1920 A	Canandaigua
†Reeder, Wilbert	1921 A (Chem)	Muncy, Pa.
†Rees, George	1919 M	Clayton
†Reese, Weston Roger	1919 M	Scranton, Pa.
Reeves, Burnett Allen	1921 A (Chem)	Lyons
†Regan, Francis Aloysius	1921 C	Brooklyn
†Regan, John Francis	1922 Ag	Brooklyn
Regan, May Agatha	1921 A	New Britain, Conn.
Regan, Norma Kathryn	1919 A	New Britain, Conn.
†Regensburg, Edward Joseph	1920 A	New York City
Reguera, George	1923 C	Buenos Aires, Argentina
Reichart, Russell Christian	1922 M	Greenport
Reichenthal, Laura	1922 A	Brooklyn
†Reichman, Reginald	1922 A (Chem)	New York City
Reid, Zella Janet	1922 A	Albion
Reifschneider, Felix Edward	1922 A (Chem)	Hempstead
Reigart, Elizabeth Hodgson	1919 A	Yonkers
†Reilly, George Kenneth	1922 M	Hoboken, N. J.
†Reineke, Lester Henry	1921 Ag	Baltimore, Md.
†Reineman, Howard Hartje	1921 M	Pittsburgh, Pa.
Reinhard, Melvin Charles	1920 V	Buffalo
†Reinhard, Warren Darress	1922 M	Jersey City, N. J.
Reith, Marie	1921 M	New York City
†Remick, Arthur Edward	1921 A (Chem)	New Rochelle
Remsen, Margaret Abbie	1921 A	Brooklyn
Renfrew, Franklin Ward	1919 M.D. (N. Y. C.)	New York City
Rex, Winifred Irene	1922 Ag	Atlanta
Reyes, Hermenegildo Balbino, A.B., M.E.	Grad	Malolos, P. I.
†Reyna, Leon C.	1921 M	Ithaca
†Reynolds, Almon Wentworth	1920 M	Oriskany Falls
Reynolds, Bernice Caledonia	1920 Ag	Buffalo
Reynolds, Ernest Lawrence	1923 M	Bombay
†Reynolds, Lewis Minter	1919 M	Liberty
†Reynolds, Samuel Henry	1922 M	Waterbury, Conn.
Reznikoff, Paul, B.S.	1920 M.D. (N. Y. C.)	Brooklyn
Rhode, Clarence Bennet	1922 A	New York City
†Rhodes, Howard Erastus	1922 M	Greene
Rhodes, William George	1922 M	Ithaca
Ribble, Margaretha Antoinette, B.A.	1919 M.D. (N. Y. C.)	Wytheville, Va.
†Rice, Emory Clark	1919 M	Baltimore, Md.
Rice, Esther Myrick	1920 Ag	Burt
†Rice, Harry	1921 Ag	Brooklyn
Rice, Marion Electa	1920 Ag	Homer
†Rice, Randolph Packard	1921 M	Pittsburgh, Pa.
†Rich, Edward Lamour, jr.	1921 Ag	Catonsville, Md.
Richards, Dorrice Anwyll	1920 A	Ithaca
Richardson, Cornelius Howard	1922 M	West New Brighton
Richardson, Eliza Jones	Sp Ag	Ithaca
†Richardson, John Stephen	1923 M	Philmont
Richardson, Lee Simonson	1922 M	West New Brighton
Richardson, Robert Duane	1922 C	Frankfort
Richeson, Ruth	1920 A	Union City, Ind.
†Richmond, Donald Everett	1920 A	Great Barrington, Mass.
Richmond, Evelyn Gertrude	1922 A	Rochester
†Richmond, William Edwin	1920 M	Colorado Springs, Colo.
†Rickard, Donald Sims	1921 A	Summit, N. J.
†Rickard, Eric Martyn	1921 M	Summit, N. J.
Rider, Arthur John, B.S., M.S.	Grad	Ithaca
Rider, Helen	1921 Ag	Washington, D. C.
†Rider, Jonathan Benjamin	1922 Ar	Riders Mills
Riffe, Laurretta Elizabeth	1921 A	Elmira
Riley, Effey Lena	1919 Ag	Rochester
Riley, Frances Heisler	1919 Ag	Wilmington, Del.
†Riley, John Philip	1921 C	Bellows Falls, Vt.
†Riley, Ralph Lawson	1922 M	Albany, Ga.
Ringer, Michael, B.S.	1919 M.D. (N. Y. C.)	New York City

†Riordan, Francis John	1923 C	Glens Falls
Ripley, Edward Warren, B.S.	1919 M.D. (N. Y. C.)	Brandon, Vt.
Rippe, William Frederick	1922 M	Mount Vernon
Rites, Marion Burhanse	1923 M	Ithaca
†Rittershausen, August Willam	1921 Ag	Youngsville
†Rivenburgh, Dexter Vosburgh	1920 Ag	Ithaca
†Roach, William Clyde	1922 A	Indianapolis, Ind.
Roberts, Alan Young	1922 C	Takoma Park, D. C.
Roberts, Clarence Roger	1922 V	Holland Patent
†Roberts, Harvey Emmett	1919 M	East Orange, N. J.
†Roberts, Henry Allison	1922 C	Ossining
Roberts, Marjorie Irene	1920 Ag	Dundee
†Roberts, Wendell Foster	1921 M	Stapleton
†Robinson, Aubrey Eugene	1920 V	Corona
†Robinson, Frank Howland	1921 Ar	Albany
Robinson, Lloyd Watson	1919 Ag	Andover
†Robnett, James Powell	1922 A (Chem)	Brownwood, Texas
†Robson, Orson Rupert	1920 Ag	Hall
†Roche, Angelo James	1920 A	Penn Yan
†Rockwell, Elias Smith	1923 M	Berkeley Springs, W. Va.
†Rodwell, Ward Arthur	1920 Ag	Albion
Roehl, Louis Michael	Sp Ag	Ithaca
Roelofs, Charles Richard	1922 M	Pittsburgh, Pa.
†Roemer, Hubert Joseph	1922 A (Chem)	Toledo, Ohio
Roenne, Henry Frank	1921 Ag	New York City
Roesch, Robert Evans	1922 M	East Orange, N. J.
Roose, Minna Gesine	1920 Ag	Buffalo
†Roess, Charles Hugo	1922 A (Chem)	Oil City, Pa.
†Roess, Gustav Frederick, jr.	1921 A (Chem)	Oil City, Pa.
Rogde, Sigurd	1919 C	Kristiania, Norway
†Rogers, Donald Atwater	1923 M	Oswego
Rogers, Edna Mary	1921 A	Hammond
Rogers, William Alexander, Ph.B.	1919 M.D. (N. Y. C.)	New York City
†Rombach, Fred Wilson	1921 M	Watsonstown, Pa.
†Rometsch, William Henry, jr.	1921 A (Chem)	Philadelphia, Pa.
†Ronan, Thomas Edward	1922 A (Chem)	Athens, Pa.
†Root, Edward William, jr.	1922 A (Chem)	Brockport
Root, Frederick Charles	1922 A	North Tonawanda
Roraback, Mildred Ruth	1919 A	Kinderhook
Rosenblum, Joseph, B.S.	1921 M.D. (N. Y. C.)	New York City
†Rosenzweig, Lewis	1923 M	Rochester
Ross, Adelaide Helen, B.A.	1921 M.D. (N. Y. C.)	Nyack
†Ross, Charles Chandler	1921 Ag	Chestnut Hill, Pa.
Ross, Harriet Frances	1919 A 1922 M.D.	Brentwood, L. I.
Ross, James Albert	1923 M	Dryden
†Ross, Robert Myers	1923 M	Sheldon, Ill.
†Roth, Eugene Debs	1922 M	Ithaca
Roth, John Edward	1922 A	Tulsa, Okla.
†Rothschild, Wilfred A.	1923 C	New York City
†Rothstein, Howard Henry	1922 M	Johnstown, Pa.
Rothwell, Alice Ermina, B.S.	Grad	Elmira
Roux, Louise Martha	1920 Ag	East Orange, N. J.
Rowe, Mildred Virginia	1922 A	Hampton, Va.
Rowlee, Silence	1920 A	Ithaca
Royce, Arch Cecil	1923 M	Norwood
Royce, Elizabeth Hurd	1922 Ag	Ithaca
Royce, Louise I.	1921 Ag	Depeyster
Rubin, Morris	1922 Ag	Bayonne, N. J.
Rubin, Samuel	1922 A	Brooklyn
Rubinfield, William	1921 A	Jersey City, N. J.
Rubinow, Leonora Blanche	1920 A	Newark, N. J.
†Rudolph, William Frederick	1921 A	Brooklyn
†Ruehle, Otto, jr.	1922 V	Clinton Corners
†Rumanoff, Max	1922 Ag	New York City
Rundlett, Edwin Albert	1919 Ag	Staten Island
Ruoff, Frederic Lexington	1920 M	Binghamton
†Rupert, Philip Douglas	1920 Ag	Seneca
Rupert, Ida Amsinck	Sp Ag	New York City
†Rurode, William Scrivener	1920 A (Chem)	Jersey City, N. J.
Russell, Alden Hasseltine, B.S.	1922 V	Watertown, Mass.
Russell, Edwin Philip, A.B.	1920 M.D. (N. Y. C.)	Crown Point
†Russell, George Frederick	1923 M	East Aurora
Russell, George Henry	1919 Ag	Winthrop
Russell, Paul Farr	1921 M.D. (N. Y. C.)	Jamestown
†Russo, Pascal	1922 C	Buffalo
Rutan, Everett John	1919 M	New York City
†Rutenber, Charles Blackmer	1921 A (Chem)	Penn Yan
Rutty, Charles Reid	1923 M	Barton
Rutz, William Edward	1922 Ag	New York City
†Ryan, Edwin Colburn	1922 A	Winnipeg, Canada
†Ryan, John Stephen	1922 M	Buffalo

†Ryan, Phil	1920 M	Helena, Mont.
†Ryan, Thomas James	1919 M	Chicago, Ill.
†Rynalski, Augustyn	1921 A (Chem)	Fredonia
Saam, George William Anton	1921 A	Brooklyn
†Sabath, Charles Benjamin	1921 Ag	Brooklyn
†Sagal, Marcus	1921 C	Baltimore, Md.
Saha, Aatto Paivio	1922 M	Bjorneborg, Finland
Sailer, William August Furche	1922 M	Dallas, Texas
St. John, Ruth Nimmo	1922 A	Manchester
Salcedo, Hernando	1921 Ag	Bogota, Colombia, S. A.
Saltmarsh, Frances Morse	1921 A	New York City
†Sampson, Archer Maddy	1919 M	Muncie, Ind.
†Sampson, Frederick, William	1922 M	Muncie, Ind.
Sampson, Gertrude Sargent	1919 Ag	Mount Vernon
†Sams, George William	1923 M	Bath
†Samson, Hector Bradford	1921 M	Dunmore, Pa.
Sanchez, Carlos Albert	1923 C	Guatemala, C. A.
†Sanders, Edward Berrien	1922 V	Ritter, S. C.
†Sandford, Craig	1921 Ag	Flushing
Sandford, Hazel	1922 Ag	Angola
Sands, Beatrice	1919 A	Kennedy
†Sands, Evarts Foster	1921 A	Morristown, N. J.
†Sanford, Chauncey Beecher	1923 M	Seymour, Conn.
†Sanger, Edmund Charles Phipps	1922 Ag	Mount Vernon
†Sangree, Nathan Barnitz	1922 Ag	Haddonfield, N. J.
Santoro, Grace Marie	1921 A	Waterbury, Conn.
†Saphir, Herbert	1919 A	Brooklyn
Sarafian, John Richard	1920 A (Chem)	Woodhaven
†Satterthwaite, Alvin Lynam	1922 A (Chem)	Stanton, Del.
†Saunders, Floyd Cary	1921 Ag	Athol Springs
†Savage, Edward Lindley	1921 Ag	Hempstead
†Savoye, Louis Frank	1923 M	Brooklyn
†Savoye, Walter Tracy	1923 M	Brooklyn
Saxe, Gladys	1921 A	Lansdale, Pa.
Scacciaferro, Salvator John	1921 C	West New York, N. J.
†Schaaf, James Edward	1919 Ag	Nutley, N. J.
†Schack, William	1919 A	Brooklyn
Schade, John Alan	1921 A (Chem)	Holyoke, Mass.
†Schaefer, John Jacob Vogt	1921 C	Pleasantville
Schaeffer, Ralph William, B.S.	1921 M.D. (N. Y. C.)	Rochester
†Schaum, Edward Alvin	1922 A (Chem)	New York City
†Schempf, Robert	1920 C	New York City
Schenck, Marcia Farnham	1921 Ag	Madison, N. J.
von Schenk, Kurt, A.B., M.S.	Grad	Ithaca
Scherago, Morris	1919 V	Brooklyn
Schermerhorn, Cornelia Mary	1921 A	Penfield
Schindler, Theresa Elizabeth, B.A., M.S.	Grad	Gloversville
Schipper, Abigail Briggs	1922 Ag	Ellenville
†Schively, Donald Roots	1922 L	Ithaca
†Schlegel, John Albert Philip	1922 L	Roosevelt
Schleifer, Jacob Edward, B.S.	1922 M.D. (N. Y. C.)	New York City
†Schlesinger, Charles Jackson	1919 Ag	New York City
†Schlichter, William Robert	1922 Ag	Yonkers
†Schlissel, Morris	1922 A (Chem)	New York City
Schlobohm, Elsa Carolyn	1921 A	Yonkers
Schlossberg, Julia	1921 A	Brooklyn
Sclossman, Herman	1922 Ag	Brooklyn
†Schmidt, August, jr.	1919 M	Ithaca
†Schmidt, Francis Joseph	1921 L	Auburn
Schmidt, Margaret Veronica	1921 A	New York City
Schmidt, Walter Schoellkopf,	1921 A	Buffalo
Schmoker, Edward Adolf, D.V.M.	Grad	Interlaken, Alpenstrasse, Switzerland
†Schmutz, Frederick Charles	1919 A (Chem)	West Hoboken, N. J.
†Schnatz, Frederick Theodore	1922 A	Brooklyn
†Schneider, Jerome George Frederick	1921 A (Chem)	New York City
†Schnell, Harry Julius, jr.	1922 A	South Orange, N. J.
Schoenfeld, Adele	1921 A	Cortland
†Schoepflin, Frederick Foeller	1922 Ag	Buffalo
†Schofield, Hayden Luther	1922 A	New Dorp
Schrader, Helen Margaret	1919 A	Plattsburg
Schradieck, Henry Edward, B.S., M.S.	Grad	Brooklyn
Schrankel, Rupert Albert	1919 A 1922 M.D.	Buffalo
†Schultheis, Henry	1922 Ag	College Point
†Schulz, Eric Theodore	1920 A	Wilkes-Barre, Pa.
Schumann, Dorothy Emma	1922 Ag	Brooklyn
†Schustek, Irving Allan	1920 A	New York City
Schuyler, Louise Alma	1920 Ag	Camillus
†Schwager, Harry Leon	1921 Ag	Wilkes-Barre, Pa.
†Schwamm, George, jr.	1921 V	New York City
Schwartz, Irving, B.S.	1921 M.D. (N. Y. C.)	New York City

†Schwartz, John Eric	1922 Ag	Hamilton, Ohio
†Schwartz, Samuel	1921 Ag	Brooklyn
†Schwartzreich, Sol	1920 M	New York City
Schweitzer, Gretchen	1921 A	Brooklyn
Schweitzer, Thomas Robert	1919 Ag	Brooklyn
Scott, Edith	1919 A	Englewood, N. J.
†Scott, Merit	1920 A	Glens Falls
†Scott, Owen Wallace	1922 C	Binghamton
Scott, Sarah Elizabeth	1922 A	Syracuse
Scott, Stuart George	1922 Ag	Ithaca
Scott, Walter, B.S., B.A., A.M.	Grad	Akron, Ohio
†Scott, William Edrington	1922 L	Fort Worth, Texas
†Scouller, Stewart Cory	1923 M	North East, Pa.
†Scudder, Ralph Clifton	1923 C	Northport
†Scureman, Harry Witt	1921 A (Chem)	Kingston, Pa.
Seager, Lydia Amanda	1919 A	South Orange, N. J.
Seaman, George Bridges	1922 V	Glens Falls
Seaman, Helen, B.A.	Grad	Freeport
†Searles, Elwood Fay	1922 M	Auburn
Searles, Sarah Naomi	1921 A	Cedarhurst
†Seelbach, Charles George	1919 Ag	Buffalo
†Seep, Joseph, 2d	1921 M	Oil City, Pa.
†Seibold, Carl Stephen	1919 M	Rochester
†Seidman, Alexander	1922 A	New York City
†Seidman, Solomon	1919 M	New York City
†Seifreat, Edgar John	1921 M	Dayton, Ohio
†Seitz, William Frederick	1922 A	Williamsport, Pa.
†Sektberg, Herbert Otto	1922 A (Chem)	Dover, N. J.
†Seele, Richardson	1922 C	Harrison
Seley, Samson Abraham, A.B.	1921 M.D. (N. Y. C.)	New York City
†Seligmann, Edward Baker	1922 M	Buffalo
Seney, Henry William, 2d	1922 C	Toledo, Ohio
Serrano, Luis	1919 Ag	Quito, Ecuador, S. A.
Settle, Charles Jay, jr.	1919 Ag	Cobleskill
Severance, Edith Lilian	1922 A	Buffalo
†Severinghaus, Leslie Richard	1921 A	Wheeling, W. Va.
†Sewell, Oscar James	1919 C	Olive Hill, Ky.
Seybolt, Mary Lucille	1922 A	Ridgewood, N. J.
†Seyfried, Francis Charles	1921 Ag	Rochester
†Shackelton, Horace Ellsworth	1919 A	Buffalo
†Shaner, Bernard King	1921 M	Perrysville, Pa.
†Shaner, John Dalzell	1922 L	New York City
Shanklin, George Robert	1922 C	Ensenada, Porto Rico
†Shanks, William Grant	1919 Ag	New York City
Shannon, William Assad	1922 A	Ithaca
†Shapiro, Bernard Joseph	1919 A	Brooklyn
†Shapiro, Casper	1920 A (Chem)	Brooklyn
Shapiro, Israel	1921 Ag	New York City
Sharrett, Helen Miriam	1920 A	Port Richmond
†Shaver, Edwin Roy	1921 A (Chem)	Philmont
†Shaw, John Balcom, jr.	1921 A	Summit, N. J.
†Shaw, Joseph Phippin	1919 A	Wheaton, Ill.
†Shaw, Kenneth Marshall	1920 A	Denver, Colo.
†Shelby, Alexander Winchester	1922 M	St. Louis, Mo.
†Sheldon, Martin Armstrong	1922 A (Chem)	Lowville
Shelton, Gertrude Mary	1920 A	Owego
Shen, Liang Hua, M.E.	Grad	Shanghai, China
†Shenk, Frederic Rentschler	1922 Ag	Reading, Pa.
†Shepard, Donald Lutz	1922 A	Omaha, Nebr.
Shepard, Emily Eloise	1920 Ag	Honeoye Falls
†Shepard, John	1922 Ag	Century, Fla.
Sheppard, Hubert, A.B., A.M.	Grad	Lawrence, Kans.
Sheridan, Joseph Talbot, A.B.	1921 M.D. (N. Y. C.)	New York City
†Sherk, Earl Jacob	1921 C	Harrisburg, Pa.
†Sherman, Horace Arthur	1920 A	Livonia
†Sherman, Howard Relyea, jr.	1922 M	Montclair, N. J.
Sherman, Irving Harold	1922 A (Chem)	New York City
†Sherman, Kenneth Ralph	1922 M	Sag Harbor
Sherwood, Coleman Hobart	1920 Ar	Yonkers
†Shetter, Charles Andrew	1923 M	New Cumberland, W. Va.
Shevalier, Marion Kathryn	1920 Ag	Ithaca
†Shiffer, Joseph	1920 A	Brooklyn
†Short, Thomas Albert, jr.	1922 M	Merchantville, N. J.
†Shoults, Worth Edward	1922 L	Alexandria, Va.
Shrewsbury, Marion Florence	1922 A	Callicoon
Shrum, Merah Durham	1919 A	Lynn, Mass.
†Shull, Leonard Monroe	1922 M	Shortsville
Shultz, Erna Rose	1920 A	Cohocton
†Shumway, Harold Lester	1921 M	Ithaca
†Sibley, Charles Kerr	1920 Ag	Kingston
†Sidman, Irving Nathan	1921 A	Brooklyn

†Sidway, James	1922 M	Syracuse
†Siebert, Willard Wilson	1921 M	Pittsburgh, Pa.
Siedenbarg, Henry Reinhard Ferdinand	1922 A (Chem)	New York City
†Siegel, Louis Carl	1920 Ag	Brooklyn
†Sievers, Albert William	1922 A	Hyde Park
†Sigler, John Bernard, jr.	1922 M	Ithaca
Signor, Elizabeth Arnold	1920 A	Plattsburg
Silbert, Doris	1922 A	North Plainfield, N. J.
Silva, George	1919 M	Santiago, Chile
Silvers, Lewis Julian	1921 M.D. (N. Y. C.)	New York City
Simelowitz, Aaron	1920 L	New Rochelle
†Simmen, George Pestalozzi	1921 M	Buffalo
†Simmons, Charles William	1922 M	Syracuse
Simmons, Rosine Ruth	1919 L	Williamsport, Pa.
Simmons, Ruby Jewel	1921 A	Tulsa, Okla.
†Simon, Israel Willard	1922 A (Chem)	Newark, N. J.
†Simonds, John Francis	1921 A (Chem)	Brooklyn
†Simons, Mayrant	1921 M	Summerville, S. C.
Simpson, Edith Maude	1920 A	New York City
Simpson, Elizabeth Thompson	1919 Ag	Ithaca
†Simpson, Harold Eugene	1923 C	New York Mills
†Simpson, Kenneth Franklin	1920 L	Onawa, Iowa
†Simpson, Sutherland Eric Rognvald	1921 A	Cayuga Heights
Sims, Doris Mable	1922 A	Sodus
Sines, Bernard Sterling	1923 C	Washington, D. C.
Singer, Alexander	1922 M	New York City
†Singer, Barrett	1921 L	Amsterdam
†Singleton, John Hawkins	1922 M	St. Louis, Mo.
†Sisson, George Wing, 3d	1922 A	Potsdam
†Skinner, Robert Gates	1919 M	Lakewood
Slingerland, Kathryn Lillis, B.A.	Grad	Manchester, N. H.
†Sly, Leslie Ward	1923 M	East Aurora
Small, Michael Spahr	1922 C	York, Pa.
Smellow, Josephine Rosamond	1921 A	Philadelphia, Pa.
†Smibert, Robert Merrill	1922 C	Waterbury, Conn.
Smiley, Edwina Maria, B.A.	Grad	Mansfield, Mass.
†Smith, Ainsworth Lockhart	1919 A 1922 M.D.	Brooklyn
Smith, Alexander Wesley	1921 A	Shelter Island Heights
†Smith, Alger James	1921 C	Ithaca
Smith, Alice Louise	1920 A	Cornwallville
Smith, Alise Welthy	1921 Ag	Groton
Smith, Alpheus Waldo	1919 A	Ithaca
Smith, Carl Henry, M.A.	1922 M.D. (N. Y. C.)	New York City
†Smith, Charles Thomas	1922 Ag	Franklin
Smith, Christianna, A.B.	Grad	New Bedford, Mass.
†Smith, Dana Conrad	1920 L	Minneapolis, Minn.
†Smith, Darwin Covert	1923 M	Lodi
Smith, Earl D.	1920 V	Cortland
†Smith, Edgar Donald	1922 M	Washington, D. C.
†Smith, Edwin Louis	1923 M	Elyria, Ohio
†Smith, Ewald John Joseph	1921 L	Jersey City, N. J.
Smith, George Hume, A.B.	Grad	Indianapolis, Ind.
Smith, George Parker	1921 L	Swanton, Ohio
†Smith, Harold Kramer	1922 L	Jersey City, N. J.
Smith, Harriet Alison	1921 Ag	Buffalo
Smith, Helen Davis	1922 Ag	Binghamton
Smith, Hulet Piepper	1922 A	Minneapolis, Minn.
†Smith, Irving Carleton	1920 A	Brooklyn
Smith, Jacob, B.S.	1920 M.D. (N. Y. C.)	Brooklyn
†Smith, John Harrison	1922 C	Corry, Pa.
Smith, John Lampman	1922 Ag	Craryville
Smith, John William	1923 C	Utica
†Smith, Joseph Edward	1922 C	Durham, N. C.
Smith, Luella Helen	1922 A	Gloversville
Smith, Margaret Ethelwyn	1922 A	Nyack
Smith, Marion Dunham	1920 A	Greene
Smith, Martha Towne	1919 A	Ithaca
Smith, Mary Florence	1919 A	Verona, N. J.
†Smith, Maurice Frank	1920 M	Rome
†Smith, Milton, jr.	1921 A	Denver, Colo.
†Smith, Ralph Harry	1921 A	Pittsburgh, Pa.
†Smith, R. Wallace	1920 Ag	Ithaca
†Smith, Raymond Crane	1922 A	Monroe
†Smith, Russell Lloyd	1919 C	Brooklyn
†Smith, Seward Marcus	1921 M	Wilkes-Barre, Pa.
†Smith, Stuart Russell	1923 M	Edwardsville, Pa.
Smith, Walter Fox, A.B.	1921 M.D. (N. Y. C.)	Watertown
Smith, William Randolph, A.B.	1919 M.D. (N. Y. C.)	Brooklyn
Smulovitz, Heine	1922 M.D. (N. Y. C.)	New York City
Snedeker, Alfred William	1921 A	West New Brighton
†Snibbe, George William	1922 A (Chem)	Catonsville, Md.

Sniffen, Josephine Augusta	1921 A	White Plains
†Snow, Howard Bartley	1922 M	Yonkers
Snowden, Louise Mills	Sp Ag	Auburn
†Snyder, Evon Claude	1923 M	Cheyenne, Wyo.
Snyder, Verdie Elizabeth	1920 A	Monroe, N. C.
Sobol, Bernard	1921 A	New York City
†Sokol, Samuel Maurice	1920 A	Akron, Ohio
†Solomon, Edward Lawrence	1920 M	Beaver Falls, Pa.
†Solomon, Reginald	1922 A	New York City
†Solomon, Samuel Joseph	1920 A	New York City
†Solovay, Benjamin	1919 A	Brooklyn
Solovay, Hyman	1922 A	Brooklyn
Solowey, Israel Lawrence	1921 C	New York City
†Solowey, Solomon	1921 A	New York City
†Sommer, Abram Ellison	1922 A (Chem)	Bayonne
Soper, Harold Grant	1922 Ag	Seneca Castle
†Soskin, William	1919 Ag	New York City
Souter, Charles Edward	1920 A	Whitehall
Souter, Martha Chandley	1921 A	Whitehall
†Southard, Townsend Franklin	1922 A	Ocean Side
Souza, Moacyr Alves de	Sp V	Luis de Fora, Brazil, S. A.
†Spahn, Otto Joseph	1922 A (Chem)	Pleasantville
Spahr, Mary Blanchard, B.A.	1922 M.D.	Princeton, N. J.
Spayd, Milferd Aaron	1921 A (Chem)	Van Wert, Ohio
Spear, Kenneth Barney	1923 M	New York City
†Spear, Robert Duroy	1919 M	New York City
Speer, Sara Elizabeth	1921 Ag	Washington, D. C.
Speiden, Katherine Douglas, A.B.	1921 M.D. (N. Y. C.)	Summit, N. J.
†Spencer, Adrian Lamoreaux	1921 L	Union Springs
†Spencer, George D'Esterre	1919 Ag	Brooklyn
Spencer, Jennie Phillips	1921 Ag	Lisle
Spencer, Roy Clarence	1922 A	Pennellville
Spencer, Vera Eugenia	1919 A	Sayre, Pa.
†Sperry, Sidney George	1923 M	Ithaca
†Sperry, Warren Myron	1921 A (Chem)	Lincoln Park
†Spicer, Hobart McKinley	1920 M	Norwich
†Spielman, David Bernat	1920 L	Brooklyn
†Spiers, Herbert	1922 M	Brooklyn
Spinard, Freda	1922 A	Brooklyn
†Spinder, Norman John	1921 M	Olean
†Spivak, William	1920 C	Brooklyn
Spock, Leslie Erskine	1922 L	Babylon
Sprague, Genevieve Nina	1919 A	Memphis, Tenn.
Sprague, Geraldine Esther	1920 A	Memphis, Tenn.
Sprague, John Lane	1919 M	Minneapolis, Minn.
Sprague, Mildred	Sp Ag	Liberty
Sprung, Benjamin	1923 M	New York City
†Squires, Andrew Mouhot	1922 M	Greenport
Srenco, Grace Elizabeth	1920 A	Rochester
Stacy, Helen Emily	1920 A	St. Regis Falls
Stacy, Thomas Ford	1919 M	Springfield, Ill.
Stahl, Charles	1919 A 1922 M.D. (N. Y. C.)	Albany
Stainton, Robert Sheldon	1922 M	Buffalo
Stanbro, Marie Adelaide	1921 Ag	Springville
†Standish, Gerald	1920 M	New York City
†Staneslow, John Stanislavaitis	1922 A (Chem)	Binghamton
Stanford, Hilda	1919 A	Berkeley, Cal.
Stankiewicz, Helen	1921 A	Buffalo
†Stansky, Hyman	1920 A	Brooklyn
Stanton, Nathaniel Brown, A.B.	1920 M.D. (N. Y. C.)	Bath
†Starbuck, George Taylor	1922 A (Chem)	Glens Falls
†Stark, Jesse David	1921 A	Brooklyn
†Stark, Joseph Owen	1922 M	Dover, N. J.
Starks, Donald Hand	1922 A	Chatham
†Starr, Raymond Terry	1921 M	New York City
Stasch, Dorothy	1921 A	Corning
Stasch, Emil Robert, 3d	1922 A (Chem)	Corning
Staub, Percival Hoag	1921 A (Chem)	Wellsboro, Pa.
†Stave, Frank	1921 L	Paterson, N. J.
Steadman, Ferdinande	1922 A	Yonkers
Stebbins, Charles Burdette	1922 A	Greenfield
†Stebbins, Jean Reginald	1922 M	Watertown
†Steel, Robert Wenzing	1921 A	Lansdowne, Pa.
Steele, Mary S., A.B.	Grad	Wagram, N. C.
Steer, Elizabeth Alice	Sp Ag	Albany
Steer, Margaret Eleanor	1919 Ag	Albany
†Steiner, Syndey Kendall	1920 A (Chem)	New York City
Steiner, Violet Catherine	1921 A	Brooklyn
†Steinmann, Milton Bode	1921 Ar	Rochester
Stentiford, Clara Harriet	1920 A	Ossining
Stephens, John James, 2d	1923 M	Brooklyn

Stephenson, Hadley Carruthers
 Stern, Jeno
 †Sternbach, Jacob Joel
 †Stevens, Donald Raymond
 †Stevens, Edward
 Stevenson, Charles Robert, B.S.
 Stevenson, Dorothy Jean
 †Stevenson, Warren Allen
 Stewart, Dorothy
 †Stewart, Douglas
 †Stewart, Harland Hubbard
 †Stewart, Kenneth Max
 †Stewart, Newell Coe
 Stewart, Robert George, B.S.
 †Stewart, Ralph Walton
 Stickelmyer, Ellen May
 †Stiles, Henry Thayer
 Stillwell, Charles William
 Stobbs, William Malcolm, A.B.
 Stokes, Arthur McGrath, A.B.
 Stone, Edith May
 †Stone, George
 Stone, Jane
 Stone, John Raymond
 †Stone, Linton
 Stone, Maysie
 †Storer, George Butler, jr.
 Storey, Margaret Hamilton
 Storrs, Will Carlton
 Story, Robert Knight, jr.
 †Stott, Charles Albert
 Stoughton, Wilford Francis
 †Stout, Joshua Wilson
 Stowe, Evelyn May, B.A.
 †Stowe, Lloyd
 Strack, Ernest Victor
 †Strahan, Henry Clark
 †Stratford, Frederick Franklyn
 Stratton, Mildred Elizabeth, B.A.
 †Strauss, Adrian
 †Strauss, David
 Strauss, John Noble
 Strauss, Sadye Gladys
 Street, Alice Juliet
 †Street, John Northcott
 Strong, Carol Georgiana
 Strong, Frances Miriam
 Stroup, Nathan Weller
 †Strumer, Julius
 Strunk, William Oliver
 Stuart, Lyman Knight
 Sturgeon, Myron Alfred
 Sturrock, John
 †Sturtevant, Chester Howe
 Suffin, Rosalie
 Sullivan, Alice Helen, A.B., A.M.
 Sullivan, Dorothy Fleming
 Sullivan, Ernest Vaughan
 †Sullivan, George Dewey
 †Sullivan, Michael Gerald
 †Sultan, Frederick William, jr.
 Sun, Kuo-Feng, B.S.
 Sun, Yu Faung Russell
 Sun, Yu-fong
 †Sundel, Saul Howard
 Supplee, George Cornell, B.S., M.S.A.
 Susman, Victor Samuel
 Sutton, Harry William
 Sutton, Henry Bruner, A.B.
 Sutton, John Edward, jr., A.B.
 †Sutton, Roland Lee
 Swarthout, John Wyckoff
 *Swartz, DeWitt Frank
 Swayze, Esther
 †Sweeney, Emmett Thomas
 Sweet, Elsie Marie
 Swenson, Agda Teoline
 Swick, Murray
 †Swift, Claude James
 †Swirbul, Leon
 Switzer, Virginia Watson

1919 Ag 1920 V
 1921 C
 1920 C
 1920 A (Chem)
 1922 V
 Grad
 1922 Ag
 1921 M
 1921 A
 1922 L
 1920 M
 1920 A
 1922 M
 1921 M.D. (N. Y. C.)
 1922 Ag
 1919 Ag
 1922 A
 1922 A (Chem)
 1921 M.D. (N. Y. C.)
 1919 M.D. (N. Y. C.)
 1922 Ag
 1919 M
 1921 Ag
 1922 A
 1921 A
 1922 A (Chem)
 1923 M
 1922 A
 1919 Ag
 1919 L
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 1921 Ag
 1922 L
 Grad
 1923 M
 1923 M
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 1922 M
 Grad
 1922 Ag
 1922 V
 1921 M
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 1920 A
 1919 Ag
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 1921 Ag
 1921 A
 1921 A (Chem)
 1922 M
 1920 V
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 1921 A
 Grad
 1922 Ag
 1919 Ag
 1921 A
 1921 C
 1919 M
 Grad
 1920 Ag
 1919 C
 1919 L
 Grad
 1922 A (Chem)
 1921 V
 1921 M.D. (N. Y. C.)
 1920 M.D. (N. Y. C.)
 1922 Ag
 1923 M
 1919 M
 1922 A
 1923 M
 1919 M
 1922 A
 1920 A
 1922 Ag
 1920 A
 1922 L
 1922 A (Chem)
 1920 M
 1919 A

Ogdensburg
 New York City
 New York City
 Gary, Ind.
 Newport, R. I.
 Stout, Ohio
 Buffalo
 Nelsonville
 New York City
 Plainfield, N. J.
 Geneva
 Freeville
 Buffalo
 Jersey City, N. J.
 Geneva
 Troy
 Warren, Ohio
 Brooklyn
 Ithaca
 Union Hill
 Ithaca
 Edgemoor, Del.
 Syracuse
 Ithaca
 Wilmington, Del.
 New York City
 Toledo, Ohio
 New York City
 Madrid
 Brooklyn
 Washington, D. C.
 Newark Valley
 Interlaken
 Hudson, Mass.
 Corry, Pa.
 Spring Valley
 Wappinger Falls
 Jersey City, N. J.
 Bradford, Pa.
 New York City
 Albany
 New York City
 Denver, Colo.
 Rochester
 Syracuse
 Turin
 Vernon Centre
 Harrisburg, Pa.
 New York City
 Ithaca
 Newark
 Suffolk, Va.
 Ithaca
 Syracuse
 New York City
 Grand Junction, Colo.
 Buffalo
 Deansboro
 Mohawk
 Rochester
 St. Louis, Mo.
 Chungtoa, China
 Shanghai, China
 Chungtoa, China
 Arverne
 Ithaca
 New York City
 Sidney Center
 Albion
 Albion
 Ballston, Va.
 Willard
 Findley Lake
 Auburn
 Long Island City
 Hilton
 Summit, N. J.
 New York City
 Jermyn, Pa.
 Sag Harbor
 Staunton, Va.

*Deceased.

Syracuse, Antoinette	1921 A	Rochester
Syrkin, Marie	1919 A	New York City
†Tabachnek, Mendel	1922 M	Albany
†Taft, Robert Lynn	1923 M	Marathon
†Tait, Sterling Lockie	1922 A	Gouverneur
Talbert, Earl Sigsbee	1922 Ar	Abingdon, Va.
†Taliaferro, Donald Francis	1922 M	Topeka, Kansas
Tallman, Nellie Grace	1920 A	Mount Morris
Talmage, Nathaniel Allen	1922 Ag	Riverhead
Tan, Shao-Fan	1920 A (Chem)	Shanghai, China
Tang, Chen-Long	1920 C	Chi Shii, Hupeh, China
Tarbell, Louise	1921 A	Ithaca
Tarris, Venia Laota	1921 Ag	Ithaca
†Taub, Joel	1920 A (Chem)	Newark, N. J.
Tavares, John Thomas	1919 C	New York City
†Taylor, Bayard Eugene	1922 M	Oak Park, Ill.
†Taylor, Clayton Charles, jr.	1920 Ag	Lawtons
†Taylor, Donald Fay	1921 V	Albany
†Taylor, Franklin	1922 A (Chem)	Wilmington, Del.
Taylor, John Arthur, B.S.	1921 M.D. (N. Y. C.)	Schenectady
†Taylor, Joseph Martin	1921 Ag	Corry, Pa.
†Taylor, Laurens Armstrong	1922 M	Geneva
†Tear, Frank William, A.B.	Grad	Painesville, Ohio
†Teare, George William	1923 Ar	East Cleveland, Ohio
Teed, Ralph Herman	1921 M	Springfield, Mo.
†Teeter, Sidney Monroe, jr.	1920 A (Chem)	New York City
Tefft, Elsie Roana	1919 A	Greenwich
Teixeira, Wicar Goes	1919 Ag	Para, Brazil
Temple, Olive Myrtle	1922 A	Gouverneur
†Ten Eick, Charles Watson	1920 Ag	New York City
†Tennygold, Kopple	1920 M	Saratoga Springs
†Ter Bush, Emery Boyce	1919 Ag	Greenfield
Terescewitz, Joe	1921 M	Wilkes-Barre, Pa.
Terrasse, Kathryn Elizabeth	1922 A	New York City
Teschner, Edward Posner	1922 L	New Rochelle
†Thearle, Ernest Lathrop	Sp M	Chula Vista, Cal.
Thilly, Margaret	1921 A	Ithaca
Thomas, Alice Elizabeth	1921 A	East Orange, N. J.
Thomas, Charles Kenneth	1921 A	Baldwin
†Thomas, Cora Belle	1920 A	Utica
†Thomas, Frank Howard, jr.	1921 A (Chem)	Wilmington, Del.
†Thomas, Jay Clyde	1922 M	Harvey, Ill.
Thomas, Marjorie Anna	1920 A	Summit, N. J.
Thomas, Myrtle Beatrice	Sp Ag	Utica
†Thomas, Raymond Einnon	1921 A (Chem)	Yonkers
†Thomas, Robert Mathias	1921 M	Joliet, Ill.
Thomas, Roy Hilman, A.B.	Grad	Buffalo
†Thomen, Paul Wadhams	1922 C	Litchfield, Conn.
Thompson, Howard Dresel	1922 M	Ossining
†Thompson, Merrill Needham	1921 Ag	Amherst, Mass.
Thompson, Robert William	1923 C	Corona
†Thomson, Alexander Bayard	1921 Ag	Buffalo
†Thorne, Ralph Weymouth	1921 M	Williamsport, Pa.
Thorp, Katharine	1919 A	Ithaca
†Thorpe, Carroll Walter	1922 A (Chem)	Hoosick Falls
Thropp, May Ashmore	1920 A	Trenton, N. J.
†Tibbitts, Carl Herbert	1920 A	Ithaca
†Tice, Gilbert Charles	1922 Ag	Walkill
†Tierney, John Francis, jr.	1921 C	Middletown, N. J.
†Tigue, William Thomas	1923 M	Bath
†Tilley, John Harold	1923 M	Buffalo
Tingley, Abbie Stuart	1919 Ag	Washington, D. C.
Tingley, Edith	1922 Ag	Washington, D. C.
†Tinker, Charles DeGolyer	1922 M	Sharon, Pa.
†Tinkler, Louis	1921 A	Brooklyn
†Tobey, Clinton Russell	1919 M	Walton
†Tobey, Herbert Dayton	1922 M	Walton
Tobey, Katherine Alice	1922 Ag	Ithaca
†Todd, Kenneth Russell	1922 M	Pittsburgh, Pa.
†Tompkins, Wendall Dransfield	1920 M	Rochester
†Tonkin, Maurice Bradley	1922 A (Chem)	Washington, D. C.
Tonow, Paul Takuma	Grad	New York City
Topkins, Eva	1920 A	Califon, N. J.
Topliffe, Carleton Veda	1923 M	Port Byron
†Torbert, John Guy	1922 L	Interlaken
Torrance, Charles Chapman	1922 M	Yonkers
†Townes, Charles Dwight	1922 M	Madisonville, Ky.
Townsend, Emma Natalie	1919 A	Ithaca
Townsend, Fanny Laney	1922 Ag	Elmira
Townsend, Leslie Bower	1920 A	Ithaca

†Townsend, Walter Barton	1921 A	Elmira
†Towsley, Lee Iran	1922 Ag	Rochester
Tracy, Molly Josephine	1921 A	Tenafly, N. J.
†Trainer, David, jr.	1922 M	New York City
†Tranter, William Edward	1922 A (Chem)	Niagara Falls
*Travell, Arthur Warren	1921 A	New York City
Traver, Jay R., B.A.	Grad	Willoughby, Ohio
†Travilla, James Coxey, jr.	1922 M	St. Louis, Mo.
†Travis, Reed Pelton	1920 Ag	East Stroudsburg, Pa.
Traxel, Emma Jane, A.M., B.S.	Grad	Rome
†Treman, Allan Hosie	1921 A	Ithaca
†Trethaway, Charles Broad	1921 A	Wilkes-Barre, Pa.
Trethaway, Joseph David	1919 M	Wilkes-Barre, Pa.
†Triest, William Henry	1922 C	Tompkinsville
Trigg, Irene Kathryn	1922 A	Washington, D. C.
Tripp, Violet Laura	1921 A	Glens Falls
†Troiano, Louis Thomas	1923 Ar	Port Washington
Trostler, Herma Marie	1921 M	New York City
†Trousdale, James Bashford	1922 A	Ithaca
Tu, Kuang-Tsu	1922 M	Shanghai, China
Tubbs, Leonard George	1922 M	Croton-on-Hudson
†Turnbull, Curtis Hussey	1921 Ag	Pittsburgh, Pa.
†Turner, George William	1921 M	Wilkesburg, Pa.
†Turner, Gerald Ambrose	1921 Ag	New York City
†Turner, John Corydon	1922 V	Cassadaga
Turner, Mark Nathan	1919 A	Sodus
Turpin, Marie Madeline	Sp A	Waltham, Mass.
Turteltaub, Abram Sol	1922 A	Bayonne, N. J.
†Tuttle, Arthur Lemuel	1920 Ag	Copperhill, Tenn.
Tuttle, Charlotte Campbell	1920 Ar	Lincoln, Nebr.
Tuttle, Doris Orlenda, B.A.	1921 M.D. (N. Y. C.)	Rutland, Vt.
†Tuttle, Tracy	1921 A	King Ferry
Tyler, Leland Corey	1920 Ag	Cohocton
Tyroler, Felix Raphael	1921 A (Chem)	Brooklyn
Ucros, José	1922 Ar	Bogota, Colombia, S. A.
Ufer, Frances Helen	1920 A	Wauseon, Ohio
†Uhlmann, Richard Frederick	1919 A	Chicago, Ill.
Ulman, Jeannette	1920 A	Fordham
Ulrich, Rosalie	1921 L	New York City
†Underhill, Alfred Leon	1923 M	Auburn
†Underwood, Bert Orland	1922 C	Summit, N. J.
Underwood, Francis Omar	1919 Ag	Oswego
†Underwood, Willard Lane	1923 C	Deposit
Uriarte, Eduardo	1920 M	Buenos Ayres, Argentina
†Usher, Robert Reese	1922 Ag	East Hamilton
Uttal, Joseph	1922 A (Chem)	New York City
Utz, Frederick William	1922 M	Wilkes-Barre, Pa.
†Valderrama, Mariano Alfredo	1919 C	Ithaca
†Van Alstyne, Walter Kent	1921 A	Binghamton
Van Arsdale, Frances Luella	1920 Ag	Alden
†Van Campen, John Alden	1921 M	Elmira
†VandeBoe, Louis Bristol	1920 Ag	Claverack
†Vandervort, John	1922 V	Sidney Center
†Van Duzee, Edward Heath	1921 A (Chem)	Hamburg
Van Dyck, Miriam Hasbrouck, A.B., A.M.	Grad	New York City
†Van Mater, James Bartholomew	1922 M	Atlantic Highlands, N. J.
Van Ness, Helene Geertru	1919 A	Greenwich
Vannote, Howard Ball, jr.	1922 M	Hasbrouck Heights, N. J.
Van Nuys, Ellen Margaret	1919 A	Somerville, N. J.
Van Pelt, William Hermann	1922 C	Brooklyn
†Van Sweringen, Raymond Adams	1920 M	Cleveland, Ohio
†Van Valkenburg, Kenneth Hastings	1920 M	Richmond Hill
†Van Valkenburg, Paul Iretus	1920 C	Richmond Hill
Van Valkenburgh, Joseph Dwight	1922 M	Greene
Van Volkenberg, Horatio Luther	1919 Ag	Springville
Van Wagenen, Loraine McNeill	1920 Ag	Lawyersville
Van Wagenen, Sarah Lamont	1920 Ag	Lawyersville
Van Wagenen, William Perrine, A.B.	1921 M.D. (N. Y. C.)	Worcester
Van Winkle, Katherine, B.S.	Grad	Oakville, Wash.
†Van Woert, Lamont Rutgers	1922 Ag	Athens
Varley, James Richard	1920 V	Greenwich
Varona, Michael Chinchilla	1920 M	Havana, Cuba
Vass, John Isaac	1922 A	Blairstown, N. J.
Verbyla, Albert Edward	1922 A (Chem)	Danbury, Conn.
†Verhalen, Bardo Stephen	1922 V	Burlington, Wis.
Vermilye, Sherwood	1921 M	Closter, N. J.
Verwiebe, Alma Bertha	1922 A (Chem)	Buffalo
†Verweibe, Frank Louis	1920 M	Buffalo
Vessell, Harry	1922 M.D. (N. Y. C.)	New York City

*Deceased.

Vester, William Frederick	1922 A	Westerleigh
†Vettel, Henry	1920 Ag	New York City
†Vieweg, Hermann Frederick	1921 A (Chem)	Elmira
Vigert, Vilma	1919 Ag	New York City
Vines, Marion Elizabeth	1922 A	Saratoga Springs
Vinograd, Bertha Myrtle	1921 Ag	New York City
†Vischer, Peter	1919 A	New York City
Vizioli, José	Sp Ag	Piracicaba, Brazil
Vogel, Anna Marie	1921 A	New York City
†Vogel, Bernard Walton	1921 L	Woodbridge, N. J.
Vogel, Irvin, B.S., M.S.	Grad	Florence, Nebr.
†Voigt, Louis Wainwright	1922 A	Pittsburgh, Pa.
†Voisinet, Walter Eugene	1920 M	Buffalo
†Volkert, Robert Morris	1920 Ag	New York City
†Volpe, Innocent James	1922 C	Newark, N. J.
Von Beck, Marion Elfrieda	1922 A	Carbondale, Pa.
†Vosburgh, Frederic Leon	1921 A	Auburn
†Vosburgh, George Otto	1923 M	Palatine Bridge
†Waag, Herman Benoit	1919 M	New York City
Wade, Preston Allen	1922 A	Helena, Mont.
†Wadsworth, James Raymond	1920 A	Hastings
Wadsworth, Leota Ada	1919 Ag	Brooklyn
Wadsworth, Ruth Flanigen, A.B.	1919 M.D. (N. Y. C.)	New York City
†Wadsworth, William Steele	1921 Ag	Farmington, Conn.
†Wager-Smith, David Richard Willson	1922 Ag	Lansdowne, Pa.
†Wagner, Glenn Lawrence	1923 M	Buffalo
†Wagner, Vernon Wils	1920 Ag	Brooklyn
†Wahl, Charles Jacob	1922 A	Pittsburgh, Pa.
†Wahl, John Estabrook	1921 M	Chicago, Ill.
Waite, Louise Alberta	1921 A	Fort Ann
†Wakefield, Bernard G.	1922 V	Cuba
Wales, Walton Glover	1922 A	Norfolk, Va.
†Walker, John Melvin	1923 M	Tarentum, Pa.
Walker, Mercy Reed	1921 Ag	Canajoharie
†Walker, Ralph Henry	Sp Ag	Westfield
†Walker, William Allen	1920 A	Byron
Walker, William Jeston	1922 A (Chem)	Palmer
†Walkley, Clarence Willard	1921 A	LeRoy
Wallace, Bertha Edna	1922 Ag	Middletown
†Wallace, Francis Doolittle	1921 A	Geneva
†Wallace, James Sperry	1922 A	Waterbury, Conn.
Walls, Bradley Dorr	1922 M	Buffalo
†Walter, David Sargent	1922 M	Swarthmore, Pa.
†Walter, Harold John	1922 A	Pueblo, Colo.
†*Waltermire, Albert Louis	1923 M	Philmont
Walters, Margery Laura	1922 Ag	Rochester
Walton, Alfred Bailys	1922 M	Woodhaven
†Walworth, Chester Alexander	1920 A (Chem)	New Rochelle
Walzer, Matthew, A.B.	1919 M.D. (N. Y. C.)	Brooklyn
†Wandell, Walter Jason	1921 A	Bloomington, Pa.
Wang, Chieh-Yao, A. T. E. C.	Grad	Ningpo, China
Wang, Ching Hsien, C.E.	Grad	Tientsin, China
Wang, Tei Chong, C.E.	Grad	Weih sien, China
†Ward, Albert John	1921 A	Ithaca
Ward, Churchill Lyon	1923 M	Wellsville
Ward, Elizabeth Bowlby	1922 A	Elizabeth, N. J.
Ward, Margaret Ann	1922 A	Belmont, N. J.
†Ward, Nairne Forsyth	1921 M	Lockport
†Wardenburg, Harry George	1920 M	Brooklyn
†Wardwell, George Risley	1922 A	Oil City, Pa.
†Wardwell, Jerome Kenith	1922 M	Union Springs
Warne, Celia Jeannette	1920 A	Ithaca
†Warne, Colston Esty	1920 A	Ithaca
†Warne, Glenn Roy	1920 Ag	Ithaca
Warner, Jeannette	1919 Ag	Wellington, Ohio
Warner, Sherman Driggs	1922 M	Queens
†Warner, Theodore Mallory	1922 Ag	Wellington, Ohio
†Warren, Donald Howe	1921 Ag	Ellensburg Depot
Warren Edith	1920 A	Castile
†Warren, Theodore Edward	1921 L	Ashtabula, Ohio
†Washburn, Joseph Hulley	1922 M	St. Paul, Minn.
Washburn, Robert Collyer	1922 Ar	New York City
Washington, John Clement	1922 M	Goldsboro, N. C.
Wasson, Robert Alexander	1922 M	Mattituck
†Wasson, William Jacob	1923 Ar	Camden
Waterman, George Willis, Ph.B.	1919 M.D. (N. Y. C.)	Providence, R. I.
Watkins, John Wheeler	1922 M	Utica
†*Watros, Paul Kenyon	1923 M	Norwalk, Ohio
Watson, Mary	1919 A	Pittston, Pa.
†Watson, Numa Augustin	1922 A	Washington, D. C.

*Deceased.

†Watson William Edward	1923 M	Toledo, Ohio
†Watson, William Law	1922 A (Chem)	Pittston, Pa.
†Watt, Edgar Raymond	1919 M	Ithaca
Watters, Hyla Stowell, B.A.	1921 M.D. (N. Y. C.)	New York City
†Watters, Richard John, jr.	1920 M	Buffalo
Weaver, Harry, A.B.	1921 M.D. (N. Y. C.)	Amsterdam
†Weaver, William Daniel	1922 M	Lancaster, Pa.
Weaver, William Jack, B.S.	Grad	Highland
†Webb, Benjamin Wellington	1922 M	Greenport
Weber, Alice Dora	1922 A	New York City
Webster, Lois Irene	1920 Ag	Stanley
Webster, Robert Lorenzo, A.B.	Grad	Ithaca
†Weeden, Edward Horatio	1922 A	Sidney
Weeden, Willis Morris, A.B.	1919 M.D. (N. Y. C.)	Frankfort
†Weedon, Hugh Hampton	1922 C	Baltimore, Md.
Wehrle, Lawrence Paul, B.S., M.S.	Grad	Ithaca
†Weiant, Clarence Wolsey	1919 A (Chem)	Haverstraw
†Weiant, Warren Swift, jr.	1922 M	Newark, Ohio
Weichsel, Carl Christian	1922 M	Dallas, Texas
Weidberg, Naphtali, B.S. in C.E.	1921 C	New York City
Weidman, Florence Elizabeth	1922 A	Gloucester, N. J.
Weigt, Marie Elizabeth	1922 A	Flushing
†Weil, Edward	1920 M	Brooklyn
†Weil, Edward Sidney	1921 A	Chicago, Ill.
Weil, Evelyn Hannah	1921 A	Philadelphia, Pa.
Weil, Renee	1922 A	Brooklyn
†Weingast, Joseph	1920 A (Chem)	Brooklyn
†Weinheimer, Claude Miller	1920 M	North Tonawanda
†Weinstein, Ezra	1921 L	Perth Amboy, N. J.
Weinstein, Fred	1922 Ag	New York City
†Weir, Robert Hamilton	1920 C	Stamford, Conn.
†Weis, George William	1921 M	Wilkes-Barre, Pa.
†Weis, Norman Albert	1922 A (Chem)	Buffalo
†Weisberg, Hyman	1921 M	Kingston
†Weiss, Morris	1922 M	Brooklyn
†Weiss, Simon	1920 Ag	Monticello
†Weiss, William	1922 A	Toronto, Canada
†Welch, William Miller, 2d	1920 M	Yardley, Pa.
Welkowitz, Ruth Edith	1922 A	Sharon Springs
†Wellenkamp, Paul Gustave	1922 M	Hammondsport
Wellhouse, Walter Housley, B.A., M.A.	Grad	Ithaca
Wells, Guy William, Ph.B.	1920 M.D. (N. Y. C.)	Montrose, Pa.
†Wells, Laurence Raymond	1921 C	Schuylerville
†Wells, LeRoy Bullard	1922 A (Chem)	Schuylerville
†Wells, William Henry	1921 Ag	Roslyn
†Welsh, Joseph James	1922 M	Tompkinsville
†Weltmer, William Harvey	1922 M	Pelham
†Wemple, Edgar Earl	1922 M	Elmira
Wendell, Rosamond Hill	1922 Ag	Lockport
†Wendnagel, Charles Eugene	1922 M	Chicago, Ill.
†Werbelowsky, Isidor	1921 A (Chem)	Brooklyn
†Werley, Berlyn McIntyre	1922 M	Ithaca
†Werring, Walter William	1921 M	Brooklyn
Werther, Rose Marion	1919 A	Elmhurst
West, Alvin Emil	1922 M	Chevy Chase, D. C.
†West, Luther Shirley	1921 Ag	Owego
†West, Randolph Cooper	1921 C	New Orleans, La.
†Westbrook, Lloyd	1923 M	Brooklyn
Westerbeke, Philip Norman	1923 M	West Sayville
Westervelt, Ralph Henry	1922 M	Ithaca
†Weston, Wallace Douglas	1922 M	Weston's Mills
†Wetz, Homer Francis	1922 A	Trumansburg
Wexler, David	1921 A	Brooklyn
†Wheaton, Lewis Ulysses	1922 M	Buffalo
†Wheeler, Fred Eugene	1919 Ag	North Bangor
Wheeler, John Edward	1921 Ag	Brockton, Mass.
Wheeler, Mary Alexanderia	1921 A	Interlaken
†Wheeler, Robert Lincoln	1923 M	Hammondsport
†Whipple, Earl Franklin	1922 V	Rochester
White, Andrew Mercer	1921 M	Baltimore, Md.
White, Anna Laura	1919 A	Walton
White, Dorothy Allison, B.A.	Grad	Philadelphia, Pa.
†White, Elwyn Brooks	1921 A	Mt. Vernon
White, Florence Elizabeth	1920 Ag	Yorktown
†White, Frederic Fullerton	1922 M	Greenwich, Conn.
White, Harriet Marion, A.B.	1922 M.D. (N. Y. C.)	New York City
White, Karin Andreevna	1920 Ag	Ithaca
White, Lydia Phylancy	1922 Ag	Bath
White, Robert Ingersoll	1922 Ag	New York City
White, Ward Benjamin, A.B.	Grad	Ithaca
*Whitehead, Thomas Robinson	1922 M	LaGrange, Ill.

*Deceased.

Whitelaw, Bertha	1921 Ag	New York City
Whiting, William Alonzo, B.S.	Grad	Meadville, Pa.
†Whitman, Samuel Corbin	1919 A	Afton
†Whitney, Charles Seward, jr.	1922 M	Adrian, Mich.
†Whitney, Howard Erwin	1920 A	Albany
†Whittemore, Arthur Snow	1920 M	New York City
Wicker, Josephine Candee	1919 A	Hanover, N. H.
Wicker, Mildred Marie	1919 A 1922 M.D.	Livonia
†Wickes, Francis Allen	1921 Ag	Ticonderoga
†Wickham, Marvin Woodley	1919 M	Poughkeepsie
†Wickins, John Albert	1922 A	Scottsville
†Widrig, Raymond Victor	1923 M	Mannsville
Wiggans, Roy Glen, B.S.A., M.S.A.	Grad	Ithaca
†Wigglesworth, James Donovan	1922 M	Wilmette, Ill.
†Wilcox, Ansley, 2d	1921 A	Castleton-on-Hudson
Wilcox, Helen Wanda	1920 A	Elmhurst
Wild, Russell Burnett	1922 A (Chem)	Watervliet
†Wilder, Harris Emory	1922 M	Elmhurst, Ill.
Wilkes, Edward Theodore	1921 M.D. (N. Y. C.)	Brooklyn
Wilkes, Harriet Erwin	1922 A	Binghamton
†Wilkes, William Crockett	1922 A	Binghamton
†Wilkin, Sidney John	1922 Ag	Brockport
Wilkinson, Raymond James	1920 V	Ithaca
†Wilklow, Ward	1921 L	Ellenville
†Willard, Neil Matthew	1920 M	Buffalo
Willcox, Alanson Work	1922 M	Ithaca
†Williams, Allan Kynor	1922 M	Wharton, N. J.
*Williams, Barton Nichol	1923 M	Cleveland, Ohio
Williams, Donald DeWitt	1922 C	Corry, Pa.
†Williams, Elmer Aurthur	1922 M	Pittston, Pa.
Williams, Marguerite Jennings	1919 A	Canastota
†Williams, Noble Neelan	1923 M	Moline, Ill.
†*Williams, Oliver Besley	1923 M	Waverly
†Williams, Otis Parker	1922 C	Norwalk, Ohio
†Williams, Philip Tuttle	1922 M	Washington, D. C.
†Williams, Roger	1921 C	Belleville
Williams, William Norman	1922 A (Chem)	Schenectady
†Williamson, Clarence Suydam	1922 M	Brooklyn
†Williamson, James Wiseman	1922 A	Omaha, Nebr.
Willis, Paul Truitt, A.B.	1921 M.D. (N. Y. C.)	Niagara Falls
Willison, Dorothy	1920 A	Huntington, W. Va.
Willoughby, Wesley Fuller	1922 A	Catasauqua, Pa.
Wilson, Anna Isabella	1922 A	Yonkers
Wilson, Arthur Young	1922 M	Youngstown, Ohio
†Wilson, Edward	1921 M	Pittsburgh, Pa.
†Wilson, Harold A.	1922 A	Downsville
†Wilson, Jacob	1919 A	Brooklyn
Wilson, Margaret Fletcher	1919 A	Brooklyn
Wilson, Mildred Fay	1922 A	Ithaca
Wilson, Percy Suydam	1919 C	Glen Ridge, N. J.
†Wiltse, George Eldon	1923 C	Hannibal
†Winch, Percy Holden	1923 M	Manchester, N. H.
†Wincor, Abraham	1920 A	New York City
†Windnagle, Dewey Fenton	1923 M	Penn Yan
†Windt, V. Barthold	1921 A	New York City
Winestine, Frederica, A.B.	1920 M.D. (N. Y. C.)	Waterbury, Conn.
Winfield, Margaret Lounsbury	1920 A	Brooklyn
Winford, Castilla Amelia	1921 Ag	Ithaca
†Wingate, Kenneth Templeton	1922 M	Osceola Mills, Pa.
Winslow, George William	1922 V	Ontario, Oreg.
Winter, Allie Reeves	Sp Ag	Williamsport, Pa.
†Winter, Bailey Vernon	1922 A	El Paso, Tex.
Winter, James Henry	1921 M	Greene
Winter, William E.	Sp Ag	Williamsport, Pa.
†Wintringham, Andrews Clement	1919 A (Chem)	Millbrook
Wisner, William Dorr, A.B.	1921 M.D. (N. Y. C.)	Ransomville
Wissel, Howard Clinton	1922 Ag	Ithaca
†Wixom, Elmer Benjamin	1922 A	Trumansburg
Wolcott, Ruth	1920 A	West Hartford, Conn.
Wolf, Princess Mariam	1921 Ag	Homer
Wolfe, Florence Lora Olga	1920 A	Canastota
Wolfe, Joseph Ernest	1920 A	Ithaca
Wolfe, Lily Harriet	Sp A	Brooklyn
Wolff, Anita	1920 A	Stapleton
Wolff, Elizabeth Lucy	1921 Ag	Ithaca
Wolff, Howard	1923 M	Brooklyn
†Wolfson, Alfred Mortimer	1921 Ag	Jersey City, N. J.
†Wolkind, Samuel Seymour	1920 A	Buffalo
Wong, Kam Yuen	1919 M	Hong Kong, China
Wood, Charles Amos	1922 M	Syracuse
†Wood, Edgar Holmes	1921 A (Chem)	Port Byron

*Deceased.

†Wood, Harold Saxton	1923 M	
†Wood, Hilton Gerard	1921 A (Chem)	Mansfield, Ohio
Wood, Jessie Elmira	1922 A	Stamford, Conn.
†Wood, Karl Dawson	1920 M	Whitehall
Woodard, Ruth	1919 A	Washington, D. C.
Woodburn, Henry Milton	1922 A (Chem)	Glens Falls
†Woodin, Ernest Clinton	1923 C	Lockport
Woodman, Jocelyn	1919 A	Pawling
Woodruff, Dorothy Elizabeth	1920 A	Brooklyn
†Woods, Robert McLain	1923 M	Ithaca
†Woodward, Julian Laurence	1922 M	Elm Grove, W. Va.
†Woodward, Morton Powell	1920 A (Chem)	Altadena, Cal.
Woodworth, Ruth Adaline	1922 A	Norwood, Ohio
Work, Eunice, A.B.	Grad	Mt. Morris
†Workman, Roy Hiram	1921 A (Chem)	Tarkio, Mo.
†Works, Philip Owens	1921 A	Lititz, Pa.
Worman, Elizabeth Dorothy	1922 A (Chem)	St. Paul, Minn.
Worms, Sophie Dazian	1920 A	Brooklyn
†Wright, Benjamin Franklin	1922 M	Whitestone
†Wright, Chilton Austin	1919 C	Detroit, Mich.
Wright, Hazel Eunice	1922 Ag	New Rochelle
Wright, Ivan, A.B., M.S., B.S.	Grad	Johnson City
Wright, Mary Evalena, B.S.	Grad	Lawford, W. Va.
†Wright, Richard Glenn	1923 M	Ithaca
†Wright, Simeon Mather	1920 M	Auburn
†Wright, Sumner Bisbee	1919 M	Belleville
Wu, Wei-Yoh, B.S. in E.E.	Grad	Baltimore, Md.
Wuest, Phyllis Lois Augusta	1922 A	Hunan, China
†Wurts, John Jay	1923 C	Brooklyn
†Wurzbarger, George Gottfried	1921 Ag	Chicago, Ill.
Wyckoff, Ralph W. G., B.S.	Grad	New York City
Wynkoop, Doris DeNard	1919 A 1922 M.D.	Geneva
		Rochester
Yang, Shao Tseng	1922 Ag	Soochow, China
Yates, Elsie Trall	1921 Ag	Hillsdale, N. J.
Yellen, Irving	1922 A	Buffalo
Yellen, Maurice	1922 L	Buffalo
Yen, Hoong Kwie, C.E.	Grad	Anhui, China
Yeomans, George Alvoyd	1920 Ar	Rochester
Yoffa, Annie	1921 A	Victoria, Australia
Yoffa, Bella	1921 A	Victoria, Australia
Yokogawa, Takisuke	1921 Ar	Tokio, Japan
†York, Henry Royce	1921 Ag	Kenwood
Young, Benjamin Percy, B.S.	Grad	Ithaca
Young, Esther Rebecca	1921 Ag	Theresa
†Young, George Bibb	1921 A	New York City
Young, Gertrude Parker	1921 Ag	Mt. Vernon
Young, Harry Pestana, B.S.	Grad	Ithaca
†Young, Hiram Belding	1921 A (Chem)	New York City
†Young, Raymond David	1921 Ag	Bayonne, N. J.
†Young, William MacBride	1921 Ag	Brooklyn
Zadig, Ernest Arthur	1921 M	New York City
Zammataro, Salvatore Joseph	1921 M	Woodhaven
Zapf, Irene Augusta	1921 Ag	Ithaca
†Zaret, William	1921 L	Arverne
Zausmer, Abraham Aaron	1920 A	Waverly
Zea, Victor Nemecio	1922 M	Guayaguil, Ecuador
Zee, Nai-Zung, B.S. in C.E.	Grad	Shanghai, China
†Zehner, Louis Aylesbury	1922 Ag	Brooklyn
†Zeiger, Albert	1921 Ag	New York City
†Zeiner, Eugene Francis	1920 M	Brooklyn
Ziegelbauer, Pauline	1919 A	Gloversville
†Zimmerman, James Donald	1922 A	Cortland
Zimmerman, Lois Annette	1920 Ag	Cortland
Zinssmeister, Helen Minnie	1921 A	Herkimer
†Zock, Joseph Anthony	1922 A (Chem)	New York City
Zoller, Mabel Lucy	1920 Ag	Fort Plain
†Zuidema, Albert	1921 M	Holland, Mich.
†Zurbrick, Ansley Albert	1923 M	Clarence Center

STUDENTS REGISTERED IN THE THIRD TERM, 1918

Anderson, Ernest Gustaf, B.Sc.A. (Univ. of Nebr.), 1915	Concord, Nebr.
Anderson, Juliette Norma, B.S. (Oregon Agr.) 1918	Portland, Oreg.
Armstrong, James Patterson, L.L.B. (Albany Law Coll.) 1910	Savona
Ashley, Dorothy	Washington, D. C.
Bailey, Morrison Kyle	Lakewood, Ohio
Bailor, Winifred Georgie	Brookton
Barber, Henry I.	Darien Center
Barros-Hurtado, Guillermo, B.H. (Chile Univ.), 1915	Santiago, Chile
Barton, Phillip Benning, B.S., 1913	Willsboro
Bayle, Francis Lawrence	Glens Falls
Beardsley, Wallace Pearne	Guayama, Porto Rico
Bend, William Isidor	Brooklyn
Benedict, Wayne Gilbert, A.B. (Colgate Univ.) 1906	Oxford
Benson, John Phineus, B.S. (Utah Agr.) 1915	Logan, Utah
Blew, William Harry	Niagara Falls
Boehm, Arthur Bruce	Robinson, Md.
Bowers, Cyril Yarling	Dayton, Ohio
Bowman, Harold Cook	Ogdensburg
Brandel, Myron Philip	Hamburg
Brookmire, Neil Ivan	Findley Lake
Brown, Randolph Milton	Stapleton
Bruman, Abraham Joseph, B.S.A. (Univ. of Nebr.), 1918	Lincoln, Nebr.
Burroughs, Guy Thomas	Scio
Burt, Lester Pultz	Catatonk
Bussell, Frank Pores, A.B. (Colgate Univ.), 1901	Lacon, Ill.
Butler, Orval Theodore	Horseheads
Carpenter, Charles Milton	Unadilla
Champlin, Archie Earle, Ph.B. (Alfred Coll.), 1908	Alfred
Chu, Kea-Hin	Shasi, China
Clark, Olin Mitchell, B.S. (Clemson Coll.), 1909	Clemson, S. C.
Cleminshaw, William Holbrook, jr.	Cleveland, Ohio
Collins, Anthony Henry	Des Moines, Iowa
Cooper, Herbert Press, M.S. (Univ. of Wis.), 1915	State College, Pa.
Cottrell, Edwin Harrison	East Orange, N. J.
Coville, Perkins	Ithaca
Cramer, Earnest Faville, B.S. in Agr. (Iowa State), 1915	Red Oak, Iowa
Cuffe, Frederic William	Toronto, Ontario, Canada
Davidow, Morris, B.S., 1918	New York City
Deitz, Fordyce Charles	Berne
DeWolfe, Rachel Elizabeth	Cortland
Dietrich, Charles William, jr.	Brooklyn
Donahue, Mary Ellen	Ithaca
Duncan, Natalie Woodland	Philipsburg, Pa.
Dunn, Floyd Lewis	Winthrop
Dynes, Oliver Wesley, B.S., 1907, M.S. in Agr., 1912	Fargo, N. Dak.
Emerson, Bruce Wallace	Buffalo
Ensworth, George Frederick	Westfield, Mass.
Esty, Charles Glenn	Belleville
Evans, Earl Radford	Great Barrington, Mass.
Evans, Frederic Charles	Great Barrington, Mass.
Evarts, Howard Mortimer	Buffalo
Ewing, Edward Raymond	Norwich Town, Conn.
Eyster, Lewis Arthur, A.B. (Bucknell Univ.), 1917	Fishers Ferry, Pa.
Eyster, William Henry, A.B. (Bucknell Univ.), 1914, A.M. (Bucknell), 1915	Cortland
Farnham, Laurence Vivian	Owego
Fisher, Donald	Weedsport
Force, Albert William	Ithaca
Freda, Francis Joseph, B.S., 1915	Ithaca
Friedrich, John Charles	Red Wing, Minn.
Fuller, James Ellsworth	East Hartford, Conn.
Gandia, Hector	Comerico, Toa Bajo, P. R.
Gentry, Charles Burt, A.B. (Warrensburg Coll.), 1911, B.S. in Ed. (Chicago Univ.), 1912	Springfield, Mo.
Gershoy, Alexander Morris, B.S., 1918	New York City
Gillett, Roy Lewis, B.S., 1917	Colden
Goldman, Meyer	Norma
Graeser, Albert Clarence	Charleston, S. C.
Gray, Donald McKinstry	Hudson

Hagstrom, Gosta William	Jamestown
Hammond, Maynard Charles	Port Jervis
Hampton, Randall Howard, B.S. (Va. Union Univ.), 1907, B.S., 1912	Petersburg, Va.
Hankins, Francis William	Auburn
Harvey, Lillian Glennys	Ithaca
Hendrickson, Arthur Howard, B.S. (Mich. Agr. Coll.), 1913	Berkeley, Cal.
Hendrie, Charles Francis	Brooklyn
Henigbaum, William Klemm	Davenport, Iowa
Hequembourg, Arthur William	New York City
Herrington, Wilson Andrew	Ellisville, Miss.
Hewes, Edward Blaine	Mayville
Hine, Willard Rudolph Bernard	Groversville
Hopkins, Edward Stanley, B.S.A. (Toronto Univ.), 1911, M.S. (Univ. of Wis.), 1916	Vermillion, Alberta, Canada
Howard, Edwin Laclede	St. Louis, Mo.
Huestis, Thomas Bunting	Buffalo
Hughes, Gertrude	Ithaca
Ignatiev, Olga Bervy	Bloomfield, Conn.
Jampol, Max	New York City
Jensen, Ward C., B.S. (Univ. of Cal.), 1917	Omaha, Nebr.
Jones, Ralph Felber	Red Wing, Minn.
Kaltenthaler, Henry Jacob, jr.	Philadelphia, Pa.
Koch, Catharine Elizabeth, B.S., 1909, M.A., 1916	Gowanda
Kwaan, Hon-Kwong	Ithaca
Lawrence, Walter Henry	Corfu
Leibman, Edwin Albert	Brooklyn
Leinroth, Eugene Alfred	Philadelphia, Pa.
Levy, Dorothy Franklin	Philadelphia, Pa.
Lewis, Corbin Devillo	Brooklyn
Lowe, Burton Miller	Ryegate, Vt.
Lu, Yen Chih	Anhuei, China
Luce, Laurence Edward	Stratford, Conn.
Lukens, Earl Gibson	Cowgill, Mo.
Lurio, Meyer	Brooklyn
McBerty, Ford Hapgood	Ithaca
McCune, James Edwin	Brilliant, Ohio
McDonnell, Frank Williams	New York City
McGinnis, Forrest William, B.S. (Oregon State Coll.), 1911	Corvallis, Oreg.
McRostie, Gordon Peter, B.S.A. (Ont. Agr. Coll.), 1912, M.S. in Agr. 1918	Ithaca
Martin, Thomas Lysons, A.B. (Brigham Young Univ.), 1912	American Fork, Utah
Maynard, Franklin Purdy	Stamford
Mereness, Kneeland Abram	Sharon Springs
Merker, Herman	Milwaukee, Wis.
Miller, Charles Marion	Mayville
Miller, Wayne Downing	Meriden, Conn.
Minasian, George Talmadge	Glen Ridge, N. J.
Monnett, Victor Elvert, A.B. (Univ. of Okla.), 1912	Norman, Okla.
Mott-Smith, Stanley	Honolulu, Hawaii
Murphy, Helen Elizabeth, B.S., 1917	Phoenix
Nanz, Ralph Simpson, B.S., 1912	Brooklyn
Neuhaus, Ralph	Houston, Tex.
Newton, Norman Toivo	Brooklyn
Northrop, Burdette Kibbe	St. Cloud, Fla.
Norton, Charles Erastus	Byron
Olney, Roy, B.S., 1915	Mertensia
Olson, George	Chicago, Ill.
Palmer, Margaret Helen	Detroit, Mich.
Parke, Torsten Herbert	Chicago, Ill.
Patton, Cuyler Shaw	Akron, Ohio
Peare, Willard Chase	Yonkers
Pease, Rodney Wesson	Buffalo
Phillips, Mrs. Helen Wherry, B.S. (Univ. of Pa.), 1907	Philadelphia, Pa.
Quail, Wallace Blanck	Brooklyn
Randall, Ethan James, B.S., Ped.B. (Syracuse Univ.), 1913	Oswego
Randolph, Lowell Fitz, Ph.B. (Alfred Univ.), 1916	Alfred
Raplee, Jay Wixson	Watkins
Rebmann, Godfrey Ruhland, jr.	Philadelphia, Pa.
Rees, George	Clayton
Reese, Weston Roger	Scranton, Pa.
Reyes, Hermenegildo Balbino, B.A. (Ateneo de Manila), 1914	Malolos-Bulacan, P. I.

Reynolds, Lewis Minter	Liberty
Rice, Emory Clark	Baltimore, Md.
Roberts, Harvey Emmett	East Orange, N. J.
Rockefeller, Rossman	Dryden
Rundlett, Edwin Albert	Tompkinsville
Rutan, Everett John	Brooklyn
Ryan, Thomas James	Chicago, Ill.
Salcedo, Hernando	Bogota, Colombia
Sampson, Archer Maddy	Muncie, Ind.
Sandford, Vernon Gulick	Angola
Sando, Francis Blair	Scranton, Pa.
Saville, Henry Lucian, A.B. (Wash. & Lee Univ.), 1914; A.M. (Princeton), 1915	Lexington, Ky.
Schindler, Theresa Elizabeth, B.A. (Mt. Holyoke Coll.), 1906	Gloversville
Schmidt, August, jr.	Ithaca
Schmidt, Henry George	Richmond Hill
Seibold, Carl Stephen	Rochester
Seidman, Solomon	New York City
Silva, George	Santiago, Chile
Skidmore, Lanson Bigelow	Westfield
Skinner, Robert Gates	Lakewood
Smith, Clarence Evert, A.B. (Syracuse Univ.), 1909	Greene
Smith, George Hume, A.B. (Wabash College), 1918	Indianapolis, Ind.
Smith, Raymond Stratton, B.S. (Pomona Coll.), 1907 ; B.S. in Agr. (Univ. of Ill.) 1913; M.S. (Penn. State), 1916	Monrovia, Cal.
Spaeth, John Nelson	Rochester
Spear, Robert Duroy	New York City
Sprague, John Lane	Minneapolis, Minn.
Springer, Gordon Bennett	Genoa
Stacy, Thomas Ford	Springfield, Ill.
Standish, Gerald	New York City
Stephens, Leon Mason	Albion
Stoddard, Edwin Freeman, B.S. (Penn. State Coll.), 1913	Hyattsville, Md.
Stone, George	Edgemoor, Del.
Sultan, Fred William, jr.	St. Louis, Mo.
Swartz, DeWitt Frank	Findley Lake
Tapke, Victor Ferdinand, B.S. in Agr. (Ohio State Univ.), 1914	Ithaca
Teck, Joseph	Brooklyn
Thomas, Roy Hilman, A.B. (Univ. of Kentucky), 1913	Cayce, Ky.
Thompson, Hugh Lincoln	Kansas City, Mo.
Thurston, Mather Francis, A.B., 1909	Hamburg
Tresselt, Frederick	New York City
Trethaway, Joseph David	Wilkes-Barre, Pa.
Turpin, Harold Worthington, B.S. in Agr. (Iowa State Coll.), 1916	Cape Province, So. Africa
Van de Boe, Louis Bristol	Claverack
Waag, Herman Benoit	New York City
Watt, Edgar Raymond	Brooklyn
Weeks, Frederick Albert	Bergen
Wehrle, Lawrence Paul, B.S. (Kans. State Agr. Coll.), 1914; M.S. (Kans. State Agr. Coll.), 1916	Scranton, Kans.
Wellhouse, Walter Housley, A.B. (Univ. of Kans.), 1913; A.M. (Univ. of Kans.), 1917	Ithaca
Wickham, Marvin Woodley	Poughkeepsie
Witkop, John Charles	Buffalo
Wolf, John George	Varysburg
Wong, Kam Yuen	Hong Kong, China
Wright, Sumner Bisbee	Baltimore, Md.
Wright, William Edward Frost	New Rochelle
Young, Benjamin Percy, B.S. (Univ. of Kans.), 1908	Everest, Kans.
Yuasa, Hachiro, M.S. (Univ. of Illinois), 1917	Tokyo, Japan

Summary by Colleges

GRADUATE SCHOOL.....		166
COLLEGE OF ARTS AND SCIENCES		
Candidates for A.B.	Class of 1919	182
	Class of 1920	190
	Class of 1921	225
	Class of 1922	312
	Special Students.....	5
Candidates for B.Chem.	Class of 1919	17
	Class of 1920	48
	Class of 1921	70
	Class of 1922	125
		<hr/> 1174
COLLEGE OF LAW		
	Class of 1919.....	10
	Class of 1920.....	18
	Class of 1921.....	44
	Class of 1922.....	59
		<hr/> 131
MEDICAL COLLEGE		
New York City	Class of 1919	24
	Class of 1920	44
	Class of 1921	49
	Class of 1922	42
	Special Students.....	2
Ithaca Division	Class of 1922	22
		<hr/> 183
VETERINARY COLLEGE		
	Class of 1919	9
	Class of 1920	21
	Class of 1921	15
	Class of 1922	25
	Special Students.....	1
		<hr/> 71
COLLEGE OF ARCHITECTURE		
	Class of 1919	5
	Class of 1920	8
	Class of 1921	11
	Class of 1922	16
	Class of 1923	7
		<hr/> 47
COLLEGE OF AGRICULTURE		
	Class of 1919	119
	Class of 1920	130
	Class of 1921	191
	Class of 1922	192
	Special Students.....	20
		<hr/> 652
COLLEGE OF CIVIL ENGINEERING		
	Class of 1919	33
	Class of 1920	45
	Class of 1921	53
	Class of 1922	81
	Class of 1923	48
		<hr/> 260

SIBLEY COLLEGE OF MECHANICAL ENGINEERING

Class of 1919	73	
Class of 1920	77	
Class of 1921	147	
Class of 1922	346	
Class of 1923	201	
Special Students.....	2	
		846

Total Number of Students, deducting for names counted twice (25)..... 3505

Students' Army Training Corps..... 1696

Geographical Summary

New York.....2304	California 11	Wyoming 5	Philippine Islands 5
Pennsylvania ... 255	Wisconsin 10	Arkansas..... 4	Porto Rico 5
New Jersey..... 211	Oklahoma 10	Georgia 4	China 44
Ohio 97	Tennessee 9	Montana..... 4	Cuba 15
Connecticut 57	Vermont 9	Maine 4	Canada 10
Illinois..... 56	Louisiana 9	Alabama 3	Brazil 7
Massachusetts . 40	Minnesota 9	Rhode Island... 3	Colombia 6
D. of Columbia. 37	Kentucky 8	Idaho 3	Argentina 3
Maryland 29	Nebraska 8	Oregon 2	Chili 3
Missouri 24	Florida 8	Utah 2	Japan 3
Michigan 23	New Hampshire. 8	Washington 2	Mexico 2
Virginia..... 23	Delaware 7	Mississippi 1	Australia..... 2
Texas 19	North Carolina . 6	North Dakota .. 1	Ecuador 2
Indiana 16	Iowa 5	South Dakota... 1	Russia 2
Colorado..... 15	South Carolina.. 5	Territory of Hawaii 1	Guatemala 2
West Virginia... 12	Kansas 5		

ADDITIONAL ENROLLMENT

Third Term in the College of Agriculture, June-September, 1918.....	192
University Summer Session (including Summer School in Agriculture).....	1186
Winter Courses in Agriculture, 1918-1919.....	82

Total Registration by Years from the Opening of the University

1868, 412	1878, 505	1888, 1229	1898, 2543	1908, 4859
1869, 563	1879, 463	1889, 1329	1899, 2766	1909, 5194
1870, 609	1880, 399	1890, 1390	1900, 2980	1910, 5624
1871, 597	1881, 384	1891, 1670	1901, 3293	1911, 5848
1872, 539	1882, 405	1892, 1883	1902, 3457	1912, 6315
1873, 509	1883, 447	1893, 2040	1903, 3423	1913, 6496
1874, 532	1884, 575	1894, 2042	1904, 3841	1914, 6891
1875, 542	1885, 649	1895, 2057	1905, 4122	1915, 7143
1876, 561	1886, 829	1896, 2105	1906, 4225	1916, 6999
1877, 529	1887, 1022	1897, 2120	1907, 4465	1917, 5297

STUDENTS IN THE UNIVERSITY SUMMER SESSION, 1918

Including the Summer School in Agriculture

*Indicates Summer School in Agriculture.

†Indicates registration also in the Graduate School.

‡Indicates Summer Session and Summer School in Agriculture.

Abbiss, Helen Zilpher, Bach.Mus. (Bethany Coll.), 1915	Braddock Pa.
†Acomb, Helen McCurdy	Dansville
Adams, Margarite, A.B. (Vassar), 1915	Brooklyn
Aiken, Mary Elliott	Braddock, Pa.
Akamatsu, Paul, B.A. (Waseda Univ.), 1917	Shingu-cho, Japan
Alderwick, Charlotte Ann	Utica
Alexander, Virginia, A.B. (Vassar), 1889, A.M. (Cornell), 1899	Ithaca
Allen, Harriett Rebecca	Devon, Conn.
*Allen, John Liebeskind	Binghamton
*Allen, L. Clementine	Ovid
*Allen, Lillian McCord	Weedsport
*Allis, Ethel Elizabeth	Ithaca
Alston, Carrie	Pittsburgh, Pa.
Anderson, Helen Fisherick	Amherst, Mass.
*Antell, Gertrude	Brooklyn
†Arbuthnot, Anna Criswell, B.S. (Geneva Coll.), 1906, M.A. (Western Reserve), 1908	Cleveland, O.
*Armbruster, Theresa	Long Island City
Arronet, Margaret	Ithaca
Athana, George Estrate	Bronxville
†Atherton, Flora, A.B. (Wilson Coll.), 1906	Chambersburg, Pa.
Atwood, John Cowan, jr.	Ferguson, Mo.
*Austin, Dorothy Jane, B.S. (N. Y. State Coll. for Teachers), 1918	Schenectady
*Babcock, Florence Lena	Prattsburg
Bachman, Ora Belle, Bach.Mus. (Lebanon Valley Coll.), 1914	Annvile, Pa.
Badger, Edna Alrena	Brooklyn
Badger, Katherine	Ithaca
*Badger, Margaret	Ithaca
Baer, Walter David	Pittsburgh, Pa.
*Bailey, Berenice Lucy	Panama
*Bailey, Leota Mary	Westfield
Bailey, Mildred Louise	So. Dartmouth, Mass.
Bailly, Mrs. Emma Augusta, A.B. (Oberlin), 1910, A.M. (Columbia), 1916	New York City
Balderston, Ruth, B.A. (Wellesley), 1917	Colora, Md.
Barber, Ruth Anna	Pittston, Pa.
Barbour, Lamont	New York City
*Barclay, Margaret Ethel, A.B. (Adelphi), 1906, A.M. (Cornell), 1908	Brooklyn
Baris, Louise	Brooklyn
Barkdull, Roy Edgar	New Orleans, La.
Barker, Clifford Van Keuren	Staatsburg
Barker, Ethel	Ithaca
Barlow, Anna Marie	Fredonia
*Barnard, Amy	Syracuse
Barned, Louise	Ithaca
Barnhill, Martha Orene	Crawfordsville, Ind.
Barrett, Harold Gates	Susquehanna, Pa.
Barringer, Edna Bell	Tulsa, Okla.
Barris, Henry Allen	Silver Creek
†Barrow, Elva Eudora, A.B. (Randolph-Macon), 1911	Ferrum, Va.
*Barry, Marie Martha	Troy
Bartruff, Dorothy	Brooklyn
Bassett, Madeline Frances	Coatesville, Pa.
*Batsford, Edwin Goodrich	Utica
*Beals, Harlo Peabody	Wayland
Beaman, Mildred Farley	Detroit, Mich.
*Bean, Mary Elizabeth	Philadelphia, Pa.
*Beard, Pearl Mary	Washington, D. C.
Beardsley, Wallace Pearne	East Orange, N. J.
*Beaver, Ida Miranda	Bloomville
Beck, Edna Louise, A.B. (Elmira), 1910	Elmira
*Beck, Leslie Earl	Owego
†Becker, Jennie	New York City
Beckwith, Mrs. Ethelwynn Rice, M.A. (Western Reserve), 1909	Cleveland, Ohio
Beecher, Ruth Hellawell, A.B. (Smith), 1914	Youngstown, Ohio
†Beekman, Mabel Arelia	Sangerfield
Bemis, Lloyd Edward	Chicago, Ill.
*Benedict, Marjorie Juanita	Bath
Benitz Gautier, Jose	Santurce, Porto Rico
Benkert, Kathryn Olga	Lancaster, Pa.

Benness, Mildred Stuart	Moorestown, N. J.
Bennett, Curtis Burnam	Richmond, Ky.
Benoist, Alice	West Hoboken, N. J.
Benson, Keith William	Sterling, Ill.
*Beberich, Henry George	Fulton Chain
*Berkeley, Florence	Brooklyn
*Berls, Amanda Katherine, A.B., 1917, A.M., 1917	New York City
Bernis, Hildegard Margaret, B.A. (Hunter Coll.), 1910	Brooklyn
Beurket, Mrs. Dorothy Dein	Honesdale, Pa.
*Beyschlag, Emily	New York City
†Beziat, Mrs. Kate Bradley, A.B. (Vassar), 1892	Washington, D. C.
*Billings, Erma Agnes	Friendship
*Blackwell, Mabel Madeleine	Brooklyn
Blair, Margaret Adah	Duquesne, Pa.
Blaisdell, Viola Margaret, A.B. (Bryn Mawr), 1906, M.A. (Univ. of Pa.), 1915	Stockton, N. J.
Blanke, Donald Cutler	New York City
Bleecker, Winthrop Gilman	New York City
Bleiman, Gladys Katherine	New York City
Bogges, Mildred Constance	West Liberty, W. Va.
*Bohne, Florence	Northport
*Boland, Catherine Elizabeth	Troy
*Boland, Frances Mary	Troy
Bollman, Henry Otto	St. Louis, Mo.
†Bostock, Olive B. S. E., 1911 (Columbia)	Bryn Athyn, Pa.
Bosworth, Ruth, Ph.B., 1906 (Syracuse)	East Aurora
Boughner, Jane Irene	Hazleton, Pa.
Bovaird, Donald Walker	Bradford, Pa.
Bovaird, George Hyslop	Bradford, Pa.
†Bower, Ellen Lucy	Trumansburg
Bowers, Zelma Irene	Elida, O.
Bowman, Florabelle Buehrle	Lancaster, Pa.
Bowman, Louise Maude	Ithaca
*Boynton, Emily Williams	Brooklyn
†Boynton, Mary Louise, A.B. 1913 (Vassar)	Flatbush
*Braem, Grace Carmen, B.A. 1917 (State College for Teachers)	Sag Harbor
Brandt, Alice Pauline	Lewistown, Pa.
Braun, Robert	Pottsville, Pa.
Braymer, Clara Vivian	Granville
*Brewer, Margaret Halsey	Washington, D. C.
Brindle, Dorothy	Waynesboro, Pa.
Brittain, Sally, Music Grad. 1911 (Bethany Coll.)	Tazewell, Va.
Britton, Ina, A.B. 1908 (Alfred)	Friendship
*Brooks, Constance Badger, B.S., 1915 (Cornell)	Ithaca
Brooks, Marjorie Cadle	Warren, O.
Brostrom, Franklin	York, Pa.
*Brown, Florence Esther, B.A., 1914 (Hunter Coll.)	Woodhaven
Brown, Mary Cecelia	Ithaca
Brown, Roger Crafts	La Crescenta, Calif.
*Brown, Juanita, B.A., 1911 (Barnard)	Elmsford
†Bruce, Ethel Grace	Pittsburgh, Pa.
†Brumbaugh, Chalmers Sherfey, A.B., 1904 (Juniata), LL.B., 1909 (Univ. of Md.)	Baltimore, Md.
Bruner, Caroline Sneath, A.B., 1916 (Smith)	Columbia, Pa.
Buchler, Anna Marie	Jersey City, N. J.
Buelens, Jennie Frances	Erie, Pa.
Bulkley, Emily Agnes	Groton
Bullard, John Flower	Ithaca
*Bullard, Julia Marion, A.B. (Goucher)	Glens Falls
†Bump, Laurel Opal	Liberty
Burch, Naomi C.	Hartwick
Burgevin, Caroline Louise, A.B., 1914 (Barnard)	Port Chester
Burk, Richard Martin	Okmulgee, Okla.
Burns, Helen Camilla	Ithaca
Burrow, Clara	Rockaway, N. J.
Burton, Benjamin	Rutledge, Pa.
Busch, Ralph Bernig	Cincinnati, O.
Bushman, Robert Petring	East Orange, N. J.
Bustard, Dorothy, A.B. 1913 (Cornell)	Summit, N. J.
Butler, Ruth Elizabeth	Seymour, Conn.
*Buttery, Clara Frances	Smyrna, Del.
Byrd, Ralph Hamilton	Suffolk, Va.
Cahan, Harry Bruce	Philadelphia, Pa.
Campbell, Anne Gertrude	Syracuse
*Campbell, Edna Dee	Newark
†Campbell, Emily Alva	Philadelphia, Pa.
Campbell, jr., John Joseph	New York City
Campbell, Nettie Bisell	Clarion, Pa.
Carey, Bruce Anderson	Hamilton, Can.
*Carey, Daniel John	Ithaca
Carll, Haidee	Halesite, L. I.
Carmalt, Helen Amelia	Brookville, Pa.

- Carr, Hugh Roderick
 Carrasco-Calvo, Juan Leopoldo, A.B. and Math.B. 1915 (Univ. of Chili)
 Carrigan, Kathryn E. Clare, A.B. 1902 (Cornell)
 Carson, James Reed
 †Carter, Edith Blanche
 *Carter, Lorraine Whitney
 *Case, Harry Lane
 Case, Mary Margaret, B.A. 1914 (Univ. of Pittsburgh)
 *Casey, Mary Kathryn
 Cass, John Lewis
 Caufield, Bessie Mary
 *Caulkins, Harriette Alice
 *Chaffin, Caroline Wilson
 Chamberlain, Helen Duncan, Lit.B. 1916 (Grove City College)
 †Chambers, Mary Hendricks, B.A. 1917 (Univ. of Oregon)
 Champlin, Pearl Edith
 †Chang, Doen Ting
 Chao, Kuo-Tung
 *Chapin, Leila, A.B. 1911 (Smith)
 †Chapman, Margaret Josephine
 *Chase, Iva Marcella
 †Chase, Ruth Davenport
 Chen, Katherine Tsin Chen
 Chen, Ting-Hsi
 *Chesbro, May Louise
 Chiavetta, Thomas Charles
 Childs, Ada Muriel
 Chow, Yen Shuen
 Church, Elsie Sterling, A.B., 1918 (Cornell)
 Cilloniz, Miguel
 *Clark, Annabel
 *Clark, Anna May, Ph.B., A.M. 1898; 1904 (Univ. Vt.; Columbia)
 Clark, Eleanor Louise
 Clark, Helen Josephine
 Clark, Henry Tracy
 Clarke, Warren Hines
 Clayton, Delia Agnes
 *Clear, Gertrude Marie
 *Cleeves, Henry White
 *Clement, Olive Marice
 Clinton, Charles Lewis
 Clock, Phoebe Hermeo
 Coan, Katherine Teresa
 Cockcroft, Katharine Emily, A.B. and M.A. (Cornell) 1918
 Cohan, Israel, B.S. 1915 (Cornell)
 Cohen, Adelaide Flora
 Colburn, Doris Jessie
 Cole, Elmer Hopkins
 †Coleman, Charles Samuel, A.B. 1912 (Franklin & Marshall)
 Coleman, Edith, A.B. 1910 (Smith)
 Coleman, William Worthy
 †Colhoun, Helen Allen
 *Conlon, William Sylvester, B.S. (Colgate)
 Constans, Frank Schille
 *Conway, Louise Hortense
 Cook, Edith Bessie
 Cook, Florence Belle
 Cook, Junius Ford
 *Coons, George Edgar
 Copp, Herbert Guy
 *Corcoran, Mary Elizabeth
 Coughlin, Katherine Gregory
 Cowley, Rafael Mario
 Cowley, Raoul Faust
 Coyle, Edith Marguerite, B.A. 1910 (Hunter Coll.)
 Craig, Margaret Hume, A.B. 1911 (Cornell)
 *Cramer, William Ferris, B.Sc. (Iowa), B.Sc. 1916 (A. & M. College)
 Crance, Edna Almyra
 Crawford, Anna Mary
 Criswell, Howard Donald
 Crockett, Mariamee Knowles
 Crooks, Eva Myrtella
 *Cross, (Mrs.) Josephine Groat
 Crowe, Marguerite, S.B. 1909 (Univ. of Chicago)
 Crumb, Pauline
 *Cruz, Ramon de la Lawyer 1916 (Havana Univ.)
 Cuffe, Frederick William
 Culp, Viola Corine
 *Culver, Viola Amorita
 *Cummings, Madelene Louise
- New York City
 Temuco, Chili
 Ithaca
 Pittsburgh, Pa.
 Scranton, Pa.
 Worcester, Mass.
 Schaghticoke
 Pittsburgh, Pa.
 New York City
 Salem, Mass.
 Honesdale, Pa.
 Naples
 Northampton, Mass.
 Grove City, Pa.
 Eugene, Oreg.
 Oneida
 Shanghai, China
 Tientsin, China
 Katonah
 Kensington, Md.
 Warsaw
 Passaic, N. J.
 Shanghai, China
 Ningpo, China
 Fairport
 Brant
 Lexington, Mass.
 Shanghai, China
 Ithaca
 Lima, Peru
 Cohoes
 New York City
 Syracuse
 Brooklyn
 Waits
 Baltimore, Md.
 Brooklyn
 New York City
 Meadow Brook
 Albion
 Ithaca
 Trumansburg
 Baltimore, Md.
 Upper Troy
 Albany
 Brooklyn
 Antrim, N. H.
 Buffalo
 Kittanning, Pa.
 Scranton, Pa.
 New York City
 Cumberstone, Md.
 Owego
 Chicago, Ill.
 Rochester
 London, England
 Rochester
 Whitney Point
 Saugerties
 Rock Island, Ill.
 Cortland
 Holyoke, Mass.
 Havana, Cuba
 Havana, Cuba
 New York City
 Berea, O.
 Ames, Iowa
 Ithaca
 Brooklyn
 Washington, D. C.
 Ashpoint, Me.
 Wilkinsburg, Pa.
 Gowanda
 Norfolk, Va.
 Cincinnati, O.
 Ithaca
 Toronto, Can.
 Canton, Ohio
 Trumansburg
 Watertown

Cummings, Nellie Frances, A.B. 1915 (Syracuse)	Boonville
Cunningham, Emma Belle	Mt. Pleasant, Pa.
Currey, Beulah Ella	Buffalo
Currier, Aaron Healy, A.B., A.M., '92, '93 (Oberlin)	Bozeman, Mont.
*Currier, (Mrs.) Emily Clark, Pd.M. 1910 (Warrensburg Normal)	Bozeman, Mont.
†Curtis, Florence Abbott, A.B. 1908 (Cornell)	Port Chester
Cushman, Robert Alden	Ithaca
*Cushing, Agnes Josephine	Elmhurst
Dackerman, Priscilla	Delaware, O.
Damico, Daniel	New York City
Daniels, Helen Marion	Dunkirk
Dare, Florence Champion	Pitman, N. J.
Darrow, Helen	Edinboro, Pa.
Davis, Augusta Louise	Amesbury, Mass.
*Davis, Ella	Rochester
Davis, Ethel, A.B. 1909 (Cornell)	Bradford, Pa.
*Davis, Helen Isabel, B.A. 1912 (Wellesley)	Lynfield Center, Mass.
Davis, Jessica	Far Rockaway
Davis, William Frederick R.	Cayuga
Day, Carolyn	Swarthmore, Pa.
DeBevoise, Helen Howe, A.B. 1905 (Vassar)	Brooklyn
Decker, Madeline Louise	Croton Falls
Degener, Lyda May, A.B., M.A. 1914, 1916 (Cornell)	Frankford, Philadelphia, Pa.
*Deidrick, Raymond Herbert	Candor
Delbridge, Maude	Linton, Indiana
Demaree, Claire Rebecca	Newport, Pa.
Deming, Elliot Humphrey	Middletown
*DeMonde, Agnes Estelle, A.M. 1899 (Wooster Univ.), also grad. of Packer Inst.	New York City
DeMonde, Chloe Estelle	Brooklyn
Dempsey, Estelle Carmichael	Washington, Pa.
Deneke, Hermin Louise	Akron, O.
Deneweth, Amelia Elizabeth	Mt. Clemens, Mich.
Dengler, Anna Mary	Northampton, Mass.
Denny, Mattie Craig	Charlestown, W. Va.
Densmore, Richard Douglass	Erie, Pa.
*DePlanter, Anna Louise	Clifton Springs
Depue, Frances Adelia	Newark, N. J.
Deutsch, Ethel Eleanor	New York City
DeVere, Hannah Carolyn	Sacramento, Calif.
DeWitt, Madolin	Lima
*Dickey, Marie Therese Genevieve, A.B. (Cornell)	Ithaca
Dickinson, Bessie	Highland
Dickson, Elizabeth	Buffalo
Diehl, Clara Marie	Buffalo
Diehl, Leola Marvin	Cresskill, N. J.
*Dietrich, Bertha Klingler, B.S., M.A., 1912, 1915 (N. Y. Univ.)	Brooklyn
Dilgard, Bertha Elizabeth	Gormanian, W. Va.
Dittmar, Albert Louis	Williamsport, Pa.
Dockham, George Herring	Manchester, N. H.
*Dodge, Ruth Lucinda	Massena
Doelling, Hans Alfred Adalbert	New Rochelle
Dole, Ellen Elizabeth	Haverhill, Mass.
*Donahue, Margaret Louise	Ithaca
Donaldson, Margaret Caroline, A.B. 1916 (Smith)	Beaver, Pa.
*Donaldson, Mary Elizabeth	Deposit
*Donley, Robert Stephen	Arcade
Donovan, Eleanor Parsons	Elkland, Pa.
Dorsey, Amy Evelyn	Scranton, Pa.
*Doud, Edith Ninette	Fillmore
Dougall, Hugh Willard	Salt Lake, Utah
Dressor, John Fritz	Watertown
Driscoll, Alice Mary	Ithaca
Driscoll, Cecelia Catherine	Ithaca
Duddy, Katharine	Newark, N. J.
Dudley, Leon Herbert Martin	Knoxboro
*Dufour, Arline Hughes	Washington, D. C.
Duncan, Mary Emma	Hamilton, Ohio
*Dunn, Hazel Sarah	Ithaca
*Dunn, Marjorie	Albany
†Dynes, Oliver Wesley, M.S.A. 1912 (Cornell)	Ithaca
Eagle, Evelyne Shawe	Chicago, Ill.
Easton, Charlotte Dell, A.B., A.M., 1915, 1917 (Oberlin)	Mt. Morris, Ill.
Echeverri, Ricardo Camilo	Bogota, Colombia
*Edminster, Frank Custer, A.B. 1902 (Cornell)	Ithaca
†Edwards, Faye Lenore, A.B. 1917 (Cornell)	Ithaca
Edwards, (Mrs.) India Pearl Brown	Atlanta, Ga.
Eels, Kate Gay, A.B. 1903 (Cornell)	Walton
*Eighmey, Leah Williams	Cohoes
Eisenhardt, Frederick Henry	Baltimore, Md.
Elder, Ruth Merriam	Oswego

Elkan, Stanley Abe	Macon, Ga.
Elliott, Ida Mae	Buffalo
Elliott, Rebecca Patton	Philadelphia, Pa.
Ellis, William Douglas	Atlanta, Ga.
Elmer, Charles Wellington	Ithaca
Elsbree, Anna	Ithaca
Emerson, William Harold	Ithaca
Emery, Sara McCracken	Oneonta
*Emory, Mary Annette	Washington, D. C.
Eppes, Eva Taylor	Stony Creek, Va.
Estes, Wellborn	St. Louis, Mo.
Etheredge, Maude Lee	Ellensburg
Evans, Jennette, B.S. 1914 (Cornell)	Windsor
*Evans, Maud Pauline	Brooklyn
†Everett, Clara Jane	Gouverneur
*Ewing, Mary	Pittsburgh, Pa.
Ewing, Pearl Estelle	Cincinnati, O.
Eyer, Frank Lincoln	Gaffrey, S. C.
Eyer, Margaret Werts, B.S. 1897 (Limestone)	Gaffrey, S. C.
*Fabian, (Mrs.) Helen Aleksandronna	New York City
*Fagan, Mary Teresa	Brooklyn
Fanning, Grace Kathryn	Oswego
Faulhaber, Ethel	New York City
Fay, Helen T.	Port Washington
Feehan, Arthur Joseph	Ithaca
Feldmann, Mina Louise	Brooklyn
Fenner, Roland Crawford	Philadelphia, Pa.
†Ferguson, Emmie Stone	Nathalie, Va.
Ferguson, Helen Wheeler, A.B. 1915 (Wilberforce)	Xenia, Ohio
Fernandez, Manuel Jose	New York City
*Ferrier, Elsie Harriette	Peekskill
Fetterhoff, Flo Jessie	Tyrone, Pa.
Fine, Estelle	New York City
Fischer, Charles William	Atlantic City, N. J.
Fisher, Mildred Dorothy	Watertown
Fiske, Cora Etta	Weehawken, N. J.
Fitch, James Harold	Truro, Nova Scotia
*Flagler, Margaret Owen	Westfield
Flanagan, Nellie Layland	Pittsburgh, Pa.
†Flanner, Philip Douglas	Blackwell, Wis.
Flather, Alice Virginia, B.A. 1917 (Cornell)	Nashua, N. H.
Fleming, Ethel Marie	Pittsburgh, Pa.
*Fleming, Marion Catherine	Brooklyn
Fletcher, Flora Grace	Rochester
†Flockhart, Marguerite Craig, A.B. 1918 (Cornell)	Newark, N. J.
†Flory, Lillie Katherine, B.S. 1917 (Bridgewater)	Bridgewater, Va.
Fogg, Russell Harding	Toledo, O.
†Forbes, Helen	Brooklyn
Forster, Margaret Forster	Milton, Mass.
Fowler, Faye Strong	Stratford, Conn.
*Folsom, Frances Louise	Buffalo
Fraiberg, Edward Anton	Cleveland, O.
†Francis, Emma, B.S., M.S., 1914, 1916 (Columbia, Wisconsin)	Battle Creek, Mich.
†Frank, Margaret Bromley	East Orange, N. J.
Frank, Mary Irene	Oil City, Pa.
Frank, Ruth Anna	Arcade
Franklin, Kate Maurice	Pamplin, Va.
Fratanduono, Frank Anthony, jr.	Philadelphia, Pa.
Freedman, Bertha	Sea Cliff
Freedman, Frances	Sea Cliff
French, Carrie Isabella	Unadilla
*Friedlander, Ida Cohn	New York City
Friedman, Shirley	New York City
Froehlich, Frederick William	Harrisburg, Pa.
†Gaddis, Margaret Trimble	Washington, D. C.
Gale, William McClure	New York City
Galer, Adeline	Indiana, Pa.
*Galler, Emma	Brooklyn
Garden, Nelson Barker	Pittsburgh, Pa.
†Garlick, Edith Shaw	Paterson, N. J.
*Garrison, Emma Hayward	Hammondsport
Garrison, Emma Pauline	Waterloo
*Gates, Catherine Louise	Maine
†Gaudin, May Elizabeth	Carthage
Gaus, Albert Reinhard	Pittsburgh, Pa.
Gaver, Ella Fairbanks	Orrville, O.
†Gaynor, Madeline Agathe, B.S. 1917 (Elmira Coll.)	Elmira
Gennis, Milton	Dolgeville
*Genung, George Francis	Ithaca
†Genung, Mary Lucile, A.B. 1908 (Elmira Coll.)	Bath

Gerhard, Alice Hill, A.B. 1907 (Bryn Mawr)	Lancaster, Pa.
Gerhard, Elizabeth Hill, A.B., A.M. 1904, 1912 (Bryn Mawr)	Lancaster, Pa.
Gerhard, Martha Eleanor	Lancaster, Pa.
Gerow, Lilian Frances	Boston, Mass.
Gibb, John Collins	Ithaca
Giesser, Rosina Louise	Buffalo
*Gilbert, Louisa Margaret	Rushford
Gillespie, Lucia May	Buffalo
Gish, Elizabeth	Lynchburg, Va.
Glant, Mary Helen	Bareville, Pa.
Glover, Susie	Chattanooga, Tenn.
†Goddard, Gladys Adeline	New Salem, Mass.
Goff, Edith Adelaide	Ithaca
Goldberg, Elias	Petrograd, Russia
*Goldberg, Lillie	New York City
Goldfrank, Bertha	Stamford, Conn.
†Goldfrank, Fred, A.B. 1899 (Harvard), M.D. 1903 (Columbia)	Stamford, Conn.
Goldstein, Rose	Brooklyn
Golze, Nettie Marie	Clinton, Ill.
*Goodspeed, Rose Hannah	Ithaca
*Goodwin, Margaret Shippen	Philadelphia, Pa.
Goshaw, Mildred, B.S., M.A., 1913, 1918 (U. of Pa.)	Philadelphia, Pa.
†Gould, Clifford Morton	Horseheads
Gow, Grace Marie, A.B. 1917 (Upsala)	Kenilworth, N. J.
*Graham, Ruth, B.S. 1913 (Cornell)	Brookton
†Graham, Vi Arvin, B.A. 1917 (Cornell)	Richmond, Va.
Grant, Ethel Marie	Trevorton, Pa.
Gratrick, Cora Jane, Pd.B. 1906 (Albany)	Medina
Green, Andrew Haswell	Chicago, Ill.
*Green, Eustace Edward, jr., A.B. 1913 (Lincoln)	Macon Ga.
Green, M. Myrtle	Pittsburgh, Pa.
Greenlaw, Lina Munro	Springfield, Mass.
*Greer, Sedley Joseph, B.S. 1914 (Miss. Agric. Coll.)	Jackson, Miss.
*Gregory, Flossie Julia	Arkport
Gregory, Hormon Lee	Dundee
Greiff, Lotti June, B.A. 1911 (Barnard)	New York City
Griffith, Ella Porter	Madison, Ind.
*Griffith, Florence	Clayton, Mich.
Griffith, Margaret Jane	Buffalo
*Griswold, Grace Hall	Grand Rapids, Mich.
*Groh, Marion Elizabeth	Boonville
Gross, Ella, B.A. 1904 (Hunter Coll.)	New York City
Guest, Wesley Tate	Dunkirk
Guggenheim, Jack Albert	Cincinnati, O.
Gundaker, Guy, jr.	Philadelphia, Pa.
Gusman, Martha	Mobile, Ala.
Guthrie, Nancy Todd, A.B. 1903 (Blairsville)	Avonmore, Pa.
Gutierrez, Raul	Havana, Cuba
†Haehnle, Frances Dorothy	Far Rockaway, L. I.
†Haley, Nora Agnes, A.B. 1911 (New Rochelle)	Chicopee, Mass.
Haines, Bertha Adele	Anderson, Ind.
Halbert, Leah Dorothy	Cincinnati
Hallock, James Russell	Milton
*Hamblen, Lucy Malinda	Castile
*Hamson, Helen Snow	Syracuse
*Hanks, Lenda Tracy, A.B., A.M. 1901, 1902 (Barnard, Columbia)	Brooklyn
Hansson, Kristian Gosta, Mogenhetz-examen 1909 (Helsingborg, Sweden)	Glenwood-on-Cayuga
Hardy, John Everett	Oil City, Pa.
*Hare, Cora Amy, B.S. & Pd.M. 1912 (N. Y. Univ.)	Elmhurst
*Hargis, William Leonard	Hansonville, Va.
Harnish, Louise	Parkersburg, W. Va.
Harrington, Norman Spencer	Buffalo
Harris, Edna	Upper Montclair, N. J.
Harris, Hannah Joan	Carbondale, Pa.
*Harris, Louisa	Centerville
Harrison, Marjorie Emmons	Winter Haven, Fla.
Hart, Jo Preston	Cleburne, Texas
Hartmayer, Herbert William Keating	Buffalo
Hartt, Harold Arthur	Ravena
Harvey, Lillian Glennys	Ithaca
*Hauerwas, Frances Agnes	Schenectady
Havey, Joseph Perry	Yonkers
Hawley, Lily	Brooklyn
Hazell, Cyril Ebenezer	Alpena, Mich.
Healey, Lolita Evelyn, A.B. (Radcliffe), 1913	Ithaca
Hearst, Edith, Ph.B. (Wooster, Ohio), 1909	Pittsburgh, Pa.
Hedden, Elma Williams, A.B. (Goucher), 1910	West Orange, N. J.
*Heffernan, Loretta Catherine	Cazenovia
*Heffernan, Mary Margaret	Delphi Falls
*Hendryx, Olga May	Johnson City

- Hengerer, Howard Betts
 *Henricus, Ralph Charles
 Henry, Florence May
 Heraty, Edna
 Hernandez-Orpi, Enrique
 *Herrick, John Knapp
 Hesselman, Charlotte E.
 Heyburn, Lillian Carey
 Heymann, Emily Fleischmann, A.B. (Hunter Coll.) 1896
 Heymann, Theodore Seymour
 Hickling, Susan Josephine
 Hieber, Dorothy Barbara
 Hieber, Evelyn Margaret Caroline, A.B. (Cornell), 1918
 Higgins, Charles Wilcox
 *Hill, Adelaide, A.B. (N. Y. State College), 1918
 *Hill, Laurence Samuel
 Hill, Marjorie Christiane
 *Hillabrand, Grace Amelia
 †Hillas, James Garniss
 *Hilman, Mary Josephine
 †Hines, Winifred Luella, B.A. (Hunter Coll.), 1916
 Hiscock, George Singleton
 Hochman, Samuel
 *Hockenberger, Lillian Belle, B.A. (Smith), 1911
 Hofeller, Neville Kaiser
 Hoffman, Anna Jeannette
 Hogan, Ruth, A.B. (School of Education), 1917
 *Hogg, Edith Esther, B.S. (Cornell), 1917
 Hollander, Bertie Viola
 Hollander, Edith Marion
 *Hollenbeck, Lillian Lulu
 *Hollis, Arthur
 Holman, Jennie Elizabeth
 *Holmes, Rhoda Mae
 Holroyd, Ella Sively
 *Holt, Laura Louise
 Homet, Beatrice Frances
 Hood, Thomas Stanley
 †Hoover, Mary Louise
 Hopkins, Edward Stanley, B.S.A. (U. of Toronto), 1911, and M.S. (U. of Wisconsin), 1916
 Horton, Jennie Chadeayne
 How, Bang
 Hoy, David Fletcher, jr.
 Hoyt, Mary Katherine
 *Hubbard, Flavius Josephus
 †Hubbell, Rebecca Barnett, A.B. (Mt. Holyoke), 1909
 †Hubener, Virginia Rossiter
 Huey, Bess A.
 Hughes, Alwyn
 Hughes, Mrs. Bertha Deane
 Hulen, Emma, B.S. (Tufts Coll.), 1914
 Humphrey, Ethel
 *Hunt, Mary Eloise, A.B. (Wellesley), 1914
 Hurst, Elmer Travis
 Hurt, Lois
 *Iglehart, Alfreda Eloise
 Imlay, Robert
 Infanger, Adolph Omega
 *Irish, Elizabeth Fisher, A.B. (Cornell), 1917
 *Irwin, Mrs. Jean Isabel
 Isaramkura, Pravatt
 Jackson, Elizabeth Ellis
 Jackson, George Andrew
 Jackson, Helen Piatt
 Jacobs, Katherine Josephine
 Jamison, Alvaretta, A.B. (Geneva Coll.), 1913
 Jamison, Beulah Belle
 *Jansen, A. Francis, B.S. (Cornell), 1917
 Janzlik, Pearl
 Jarcho, Dorothy May
 Jayne, Lester Hand, LL.B. (Columbia), 1917
 *Jenkins, Sarah Alice
 Johnson, Elna Edwardine
 Johnson, Hermine
 *Johnson, Mrs. Jessie Martin
 Johnson, Katharine Hodges
 Johnson, Lola
 Johnson, Roger Charles
 Johnston, Dorothy Chapel
 East Orange, N. J.
 Rochester
 Philadelphia, Pa.
 Bayonne, N. J.
 Camajuani, Cuba
 Kingston
 Cleveland, O.
 Philadelphia, Pa.
 New York City
 New York City
 Edmeston
 Utica
 Utica
 Montezuma
 Port Chester
 Albany
 Stratford, Conn.
 Mount Vernon
 West Hoboken, N. J.
 Binghamton
 New York City
 Southampton
 New York City
 Union Hill
 Buffalo
 New Cumberland, Pa.
 Pittsburgh, Pa.
 Titusville, Pa.
 Newark, N. J.
 New York City
 Bath
 Whitesboro
 Geneva
 Ithaca
 Athens, W. Va.
 Ithaca
 Wyalusing, Pa.
 Indianapolis, Ind.
 Lancaster, Pa.
 Vermilion, Alberta, Can.
 Ossining
 Shanghai, China
 Ithaca
 Cohocton
 Jackson, Miss.
 New Haven, Conn.
 Bloomfield, N. J.
 Ravenswood, W. Va.
 Mt. Carmel, Pa.
 Utica
 Niagara Falls
 Barnard
 Staten Island
 Wyoming
 Pounding Mill, Va.
 Baltimore, Md.
 Niagara Falls
 Brooklyn
 Ithaca
 Brooklyn
 Bangkok, Siam
 Tazewell, Va.
 Huntington
 Ithaca
 Utica
 Beaver Falls, Pa.
 Eau Claire, Pa.
 Fonda
 Trenton, N. J.
 Brooklyn
 East Setauket
 Syracuse
 New York City
 Pittsburgh, Pa.
 Lake George
 Methuen, Mass.
 Washington, D. C.
 Carandaigua
 Philadelphia, Pa.

*Johnston, Janet Isabelle	Albany
Jones, Harry Mease	Pine Grove, Pa.
*Jordan, Catherine Helen, B.A. (Wm. Smith), 1915	Geneva
Jordan, Elizabeth, A.B. (Randolph Macon), 1916	Pulaski, Va.
†Kalb, Dorothy Buhrman, B.A. (Geo. Wash. U.), 1916	Washington, D. C.
Kalb, Elizabeth Hutt	Washington, D. C.
Kam, William John	Buffalo
Karp, Marie Antoinette	Rochester
†Kartluke, Amelia Louise, B.A. (N. Y. State Coll.), 1911	Green Island
*Katz, Adelaide Dorothy	New York City
*Katz, Emily Emma	New York City
Keim, Agatha Christeen, Ph.B. (Alfred Univ.), 1914	Olean
Kelberer, Eveline Florence	Buffalo
Keller, Edith Myrtle, A.B. (Ohio Wesleyan), 1908	Delaware, O.
Kelley, Hayward Kendall	Cleveland, O.
Kelly, Florence Bertha	Brooklyn
Kelly, Mary Blanche, A.B. (Vassar), 1902 and Pd.B. (State Coll., Albany), 1903	Penn Yan
Kelly, Miriam Anna	Minersville, Pa.
Kenyon, Alice Breese	Whitesboro
Kerr, Edith F.	Joliet, Ill.
Kevelson, Max	New York City
Kiefer, Anna Angeline	Buffalo
*Kiefer, Madeline Agnes	Buffalo
Kimura, Kazunobu	Tokio, Japan
King, Elsie	Brooklyn
Kingsley, Agnes Leone, A.B. (Syracuse), 1906	East Orange, N. J.
Kinnear, Mrs. Candace Zell	Union Springs
Kirk, Winifred, A.B. (Cornell), 1915	Newark, N. J.
Kirwan, Pauline Annie	Pittsburgh, Pa.
†Kitchin, Gladys	Salem
Kittay, Martha	Brooklyn
Klein, Sadie	New York City
Klepfer, Helen Matilda	Fayetteville, Pa.
Kline, Arthur David	Reading, Pa.
Bluebert, Katherine Elizabeth	Ithaca
*Knapp, Lester Stuart	Newark Valley
*Koppelman, Naomi	Brooklyn
*Kresky, Emma	Brooklyn
Kressler, Anna Margaret	Easton, Pa.
*Kretschman, Magda, A.B. (Cornell), 1909	Brooklyn
Kriegsman, Edwin	New York City
Krigsman, Helen Emma	New York City
Krigsman, Quita Lettie	New York City
Kuhu, Agnes	Cincinnati, O.
Kulp, Isabella Nancy	Harrisburg, Pa.
Kynett, Eleanor Gilruth	Philadelphia, Pa.
Laborde, Salvadore	Havana, Cuba
Lake, Michael	New York City
Lallou, George Edward Spatz	Philadelphia, Pa.
*Lamoureux, Mabel	Ithaca
Lande, Harold Julien	Buffalo
Lane, Emily Angeline, B.S. (Bucknell), 1910	Brockwayville, Pa.
*Lang, Ethel Mary	Albany
Lang, Helen Elizabeth	Galveston, Tex.
Lantz, Hazel May	Newark, N. J.
Large, Edward Wilson	W. Collingwood, N. J.
LaRose, Katharine Sloane	Albany
Lask, Clara	New York City
Lasser, Harriet	Newark, N. J.
Lassor, Eva Mary	Bennington, Vt.
Lau, Hing Huen	Hong Kong, China
Lau, Kwai Chenk	Hong Kong, China
Lawrence, Bertha	Phillipsburg, N. J.
Lawrence, Esther Joy, B.A. (Anderson Coll., S. C.), 1915	Duluth, Minn.
Lawson, Albert Edward	Philadelphia, Pa.
Leahy, Joanna Valeria	Holyoke, Mass.
Leathers, Lu Josephine	Carterville, Mo.
Lee, Florence Annie	Hillsboro, N. H.
*Lee, Roby Estelle	Cortland
*Leete, Mary Belle	Far Rockaway
Lefebure, Mildred Catherine	Berlin, N. H.
Leffel, Jessie Evangeline	Anderson, Ind.
Lehr, William Edward	Baltimore, Md.
Leland, Lillian B.	Ithaca
Lenahan, Edwin Joseph	Buffalo
*Leonard, Dorine Lewis	Malone
Leonard, Flora M.	Muncie, Ind.
Leonard, Julia Helen	Lockport
Levet, William Barlow	Geneva
*Levy, Beatrice	Albany

Levy, Clara	Philadelphia, Pa.
Levy, Elmer DeRoy	Newark, N. J.
Levy, Pauline	New York City
Lewis, Anna Delia, A.B., Ph.D., (Carleton Coll., Northfield, Minn.), 1889, 1896	St. Paul, Minn.
Lewis, Gladys Augusta	Oswego
Lewis, Jessie Louise	Lansdowne, Pa.
Lickley, Mary Ethelyn	Peekskill
*Linck, Francis Sophia	Constableville
*Lindsley, Luther Campbell, B.A. (William and Mary), 1908	Chase City, Va.
Linn, Bonnie Alice	Lima, Ohio
Lisk, Anna Rogers	Aurora
*Litowitz, Lottie	New York City
Livermore, James Northrup	Gowanda
†Loesch, Mary Ann	Pittsburgh, Pa.
Lofton, Merrill Collier	Chattanooga, Tenn.
Logan, Catherine Wintermute	Horseheads
*Long, Myrtle May	Tarentum, Pa.
Longstreet, Florence Edna	Brooklyn
Loomis, Bernice Elizabeth	Bainbridge
Lorentz, Edna Henrietta	Brooklyn
Lotz, Emma Elizabeth, A.B. (U. of Rochester), 1904	Rochester
*Love, Alethia Northrup, A.B. (Syracuse), 1916	Whitney Point
Love, Emily Jeannette	Erie, Pa.
Lowe, Catherine Caskey, A.B. (Mt. Holyoke), 1916	Aurora
*Lowis, Edith Hope	Dayton
*Luce, Carrie	Ithaca
*Lybolt, Lillian Antoinette	Port Jervis
Lynch, Avis Wilson	Pittsburgh, Pa.
Lynch, Frances Mathilde, A.B. (Goucher), 1912	Baltimore, Md.
Lynn, Ida Mae	Oakfield
*Mac Bean, Olive Eva	Watervliet
Mac Bean, John Peter, jr.	Philadelphia, Pa.
McCarthy, George Harold	New York City
McCarthy, Winifred	Buffalo
McClatchy, John Benjamin	Merion, Pa.
*McCloskey, Kate Agnes	Saratoga Springs
McCollough, Alma Violet	Chicora, Pa.
McCollough, Lodema Bernice	Chicora, Pa.
McCullough, Henry Geyer	Brooklyn
McCurdy, Evelyn Louise, A.B. (U. of Pittsburgh), 1915 and A.M. (Columbia), 1916	Pittsburgh, Pa.
McCutcheon, William Allen	Falconer
McEdward, John Gordon	New York City
McElfresh, John Lister	Baltimore, Md.
McGerran, Caroline Hamlin, A.B. (Cornell), 1904	Rome
*McGinn, Mary Teresa	Skaneateles
McIlhenny, Ruth Anna	Gettysburg, Pa.
MacInnes, Paul Alexander	Syracuse
*Mackay, Donald William	Constableville
*McKee, Vesta	Newfane
McKenzie, Alwilda Frances	Leamington, Ont., Can.
MacKeown, Isabel Semple	Waldwick, N. J.
Mackey, May Van DeMark	Kendall
McLean, True	New Brighton
McLennan, Dorothy Margaret	Buffalo
*McMichael, Anna Elizabeth	Lowville
McMillan, Leonia Nellie	Montreal, Que., Can.
†MacMonagle, Ruth Vesta, A.B. (St. Lawrence), 1907	Canton
McRitchie, Joan	Utica
Madrinan, Rafael	Ithaca
Maloney, William Michael	St. Paul, Minn.
Manchester, Wilbur Oscar	Nassau
Mandeville, Mabelle	Chicago, Ill.
*†Mank, Edith Webster, B.A. (Mt. Holyoke), 1913	Lawrence, Mass.
*†Mank, Helen Gardner, A.B. (Mt. Holyoke), 1909	Lawrence, Mass.
Mans, Edith Irene	Hazleton, Pa.
Markthaler, Leo Valentine	Elmira
*Marsh, Bertha Rebecca	Brookton
Marshall, Mrs. Morton Adams	Winslow, Ark.
Marshall, Virginia Walker	Cleburne, Texas
Martens, James Hart Curry	Shrub Oak
Martin, Albert Rankin	Chicago, Ill.
Martin, John Ward	Chicago, Ill.
Marx, Ellen Hedwig	Newark, N. J.
†Marx, Tillie	Newark, N. J.
Marx, Walter	Newark, N. J.
Mathewson, Lemuel	Bath
Matson, Richard McConnell	Ithaca
Matzke, Robert Rudolf	Ithaca
Maurillo, Dominick Francis	New York City

Mausert, Bernard Robert	Schenectady
†Mayhew Elizabeth Helen	Elmer, N. J.
*Meadows, Thomas Burton, B.S., M.S., A.M. (Peabody, Nashville, Tenn.), 1911, 1913, 1916	Hanceville, Ala.
Medlin, Johanna W.	Cleveland, O.
Meredith, Ruth Olive	Buffalo
Merrill, Harriet Elizabeth	Brooklyn
Merrill, Mrs. Ida Louise	Copenhagen
Merrill, Raymond Nathaniel	Springfield, Mass.
Meriwether, Mrs. Lewis	Crockett, Texas
Mertz, Gordon John	Colden
Messersmith, Leah Matilda	Pottsville, Pa.
*Metz, Claude Leslie	Tamaqua, Pa.
Meyers, Ruth Dorothy	N. Tonawanda
Michelson, Benjamin Charles	Washington, D. C.
Milulski, Florence Gertrude	Buffalo
Milks, Vera Estelle	Ithaca
Millard, Harriet Adelle	Detroit, Mich.
Miller, Chester John	Altoona, Pa.
†Miller, Eda Grace, A.B. (Cornell), 1918	Wilkes-Barre, Pa.
Miller, Emily Marguaretta	Harrisburg, Pa.
Miller, Harold Frederic	Seneca Falls
Miller, Mildred	Syracuse
*Miller, Xenia Pearl	Mechanicsburg, Pa.
Mitchell, Buhla Sinclair, A.B. (Wilson Coll.), 1908 and B.M. (Geneva Coll.), 1908	Beaver, Pa.
Mitchell, Marguerite	Buffalo
Mittelman, Louis	Buffalo
Mohr, Elsa	Philadelphia, Pa.
Moline, Hilda Josephine	Patterson
Molinet, Joaquin, jr.	Chaporra, Cuba
Molowney, Mrs. Leonore Irene	Scranton, Pa.
*Monsel, Beatrice Blanche	Ilion
†Montgomery, Lois Elizabeth, A.B. (Elmira), 1918	Warsaw
*Moody, Ruth Sophia	Adams
Mooney, Lawrence	New York City
Moore, Arthur Hale	Benton, Pa.
*Moore, Edwina Furness	Gouverneur
Moore, Marjorie Alline	Somers, Conn.
Moran, Mary Margaret	Avonmore, Pa.
†*Mordoff, Richard Alan, B.S. in Agr., A.M. (Cornell), 1911, 1918	Ithaca
Moritz, Edith Anna	Bayonne, N. J.
*Morrison, Margaret Elizabeth	Hudson Falls
Morse, Epsie Berry Brandt, A.B., A.M. (Randolph-Macon), 1914, 1916	Ithaca
*Moss, Jean	Buffalo
Mowen, Aleen Kahle	Lima, Ohio
Muldowney, Mary Helena	Heckscherville, Pa.
*Mulkin, Marion	Friendship
Muller, Richard	New York City
Murphy, Genevieve Meise	Pittsburgh, Pa.
Murray, Elva Lauretta	Ithaca
Myers, Irene Victoria	York, Pa.
†Napier, Frances Ermine, A.B. (Adelphi), 1906	Montclair, N. J.
†Nay, Sara Mabel B.A. (Ohio Wesleyan), 1916	Wheeling, W. Va.
†Naylor, Mrs. Margaret Kelly	Ithaca
*Nearing, Mary Frances, A.B. (Bryn Mawr), 1909	Troy, Pa.
†Nee, William (Wen) C. (Chen)	Foochow, China
*Nelson, Bertha Tyler	Brooklyn
*Nelson, Hazel Warwick, B.A. (Adelphi Coll.), 1912	Brooklyn
Nesbitt, Mary	Moundsville, W. Va.
Newton, Lester Charles, A.B., A.M. (Hamilton), 1908, 1911	Sauquoit
Nichols, Frances Annetta	Pittsburgh, Pa.
Nicholson, James Starr	Pittsburgh, Pa.
Nishikawa, Shoji	Hachioji, Japan
Noar, Gertrude	Philadelphia, Pa.
*Nordstrom, Frances Albertine	Jamestown
*Northup, John Winchester	Plattsburgh
*Norton, Ruth Gillette	Byron
Norwood, Lora Hortense	Ithaca
Nosek, Anton George	Cleveland, Ohio
Noyes, Mabel Marion	Dunellen, N. J.
*Nurick, Helen Dorothy, A.B. (Hunter), 1903	Brooklyn
Ober, Mabel Almira, A.B. (Smith), 1912	Orange, Mass.
*O'Brien, Anna Margaret	Albion
O'Brien, Charles X.	Elmira
O'Brien, Franklin Parsons	Evanston, Ill.
O'Connor, Katherine Mary	Girard, Ohio
O'Day, Nellie Frances	Olean
*Oldfield, Stacie Lynne	Corning

Oliphant, Alexander Coulter

*O Malley, Katherine

O'Reilly, Grace Kathryn

Ormiston, Robert St. John

†O'Rourke, Lawrence James, B.A. (Lawrence Coll.), 1915

*Osborne, Olive Louise

Ott, Rheva Suzetta

Ottley, Frances Mabel

Overbaugh, Mrs. Margaret Gibson

Oyer, Miriam Rhea

Page, Edna May

Page, Mrs. Helen Lester, A.B. (Cornell), 1909

Pagenstecher, Clara Elizabeth, A.B. (Michigan), 1905

*Palmer, Laura Alice

Palomeque, Alonzo Ermile

Papke, William August

†Parker, Esther Lydia

*Parker, Theodore Gordon

†*Parkinson, Harry Glenn, A.B. (Waynesburg), 1911; B.S. in Agr. (U. of Illinois), 1913

Parmer, Wayne Rutler

*Parnass, Theresa

Parry, Alma Jane

Parsons, Priscilla Bartlett

*Parsons, Sydney

Pascual, Vicente Parungao, A.B. (Philippine U.), 1915

Patchel, Margaret Mary

Paullin, Martha Grace

Paulsen, Alice E., A.B. (Mt. Holyoke), 1913; M.A. (Columbia), 1915

*Pearsall, Mary Grace

Pejsa, Jaro Joseph

Pennewill, Emma Lillian

Penwarden, Kathryn Olive

*Perry, Wallace Lucas

*Persons, Ruth Faye

*Pettengill Helen Fay

†Petty, Mary

Phelan, Marion Ruth

*Phillips, Mrs. Helen Wherry, B.S. (U. of Pennsylvania), 1907

*Phillips, Sophia Maud

*Phipps, Rachael Lorane

Pines, Anna Martha

Ping, Chih, B.S.A., Ph.D. (Cornell), 1913, 1918

*Platt, Emilie Louise, B.A. (Adelphi), 1911; M.A. (Cornell), 1913

Plumb, Ella Catherine

*Pond, Louise

Poole, Mrs. Ragnhild Ramstad

Porter, Roland DeLance

Posson, Marion Theresa

Potter, Elnora Atwater

†Potts, Lucy Emma, B.S. (Teachers' Coll.), 1910

Powell, Evelyn

Prager, Nellie May

Precht, Dorothy Elizabeth

*Precht, Winifred Agnes

Prentice, Marion Hart

Previn, Seigfried

Price, Mary Belle

†Provost, Eva Marian

Puffer, Harriet Alice

Pujol, John B.

Purdy, Alvin Canfield

Purdy, Randall Brockner

*Pusey, Charles William

Putnam, Annie Laura

†*Puttick, Gail Ferguson, B.S.A. (Cornell), 1918

Quayle, Harry

Quinlan, Gertrude A., A.B. (Syracuse), 1915

*Quirk, Alice Theresa

Rabi, Isidor Isaac

*Race, Bessie E., B.A. (N. Y. State Coll.), 1916

Radford, Alice Evelyn, Ph.B. (U. of Chicago), 1900

Randall, Clarissa A.

Ranke, Verna Dorothea

Ranno, Dwight Boutwell

Raupach, Clara Elizabeth

Rawlins Harold Mead

Ream, Louise Fern

Trenton, N. J.

Buffalo

Oswego

Delhi

Appleton, Wis.

Albany

Philadelphia, Pa.

Ithaca

Schenectady

Shippensburg, Pa.

New York City

Wilkes-Barre, Pa.

Dayton, Ohio

Highland

Havana, Cuba

Brooklyn

Edmeston

Rochester

State College, Pa.

Lancaster, Pa.

Brooklyn

Marcy

Washington, D. C.

Brooklyn

Arayat, Pampa, P. I.

Philadelphia, Pa.

Bridgeton, N. J.

New York City

Trumansburg

Bedford, Ohio

Philadelphia, Pa.

Honesdale, Pa.

Cortland

Hartford, Conn.

Rochester

Greensboro, N. C.

Ithaca

Philadelphia, Pa.

Waterford

Albion

Lewisburg, Pa.

Ho-Nan, China

Brooklyn

Utica

Crown Point

Ithaca

Athens, Pa.

Schenectady

Ithaca

Bryn Athyn, Pa.

Baltimore, Md.

Trumansburg

Elmira

Elmira

Detroit, Mich.

New York City

Morgantown, W. Va.

Brooklyn

Utica

Bolondion, Cuba

Middletown

Laurelton

Hamburg

Cambridge, Vt.

Wellington, S. Africa

Pontiac, Mich.

Pavilion

Batavia

Brooklyn

Rockville Center

Ithaca

Union City, Pa.

Ellicottville

Washington, D. C.

Liverpool

Glens Falls

Crawfordsville, Ind.

*Reed, Grace Perkins	Brooklyn
†Reed, Jane Riehl	Philadelphia, Pa.
*Reed, John Michael, A.B. (Holy Cross Coll.), 1905	Troy
Reess, Sarah Gertrude	Coatesville, Pa.
Reid, Nellie Luella	Clayton, Ind.
Reider, Hilda Agnes	Trevorton, Pa.
Reineman, Howard Hartje	Pittsburgh, Pa.
*Rethy, Therese, B.A. (Hunter), 1914	New York City
Reyes, Javier Vanga	Barceloneta, P. R.
Reynolds, Bernice Caledonia	Buffalo
Reynolds, Lewis G., Ph.B. (Rochester) 1906, M.A. (N. Y. U.) 1915	Brooklyn
*Rhine, Anna Pearl	Brooklyn
*Rhodes, Mildred Adelle	Groton
†Rice, Marion Electa	Homer
Rice, Randolph Packard	Edgewood, Pa.
Rich, Alice Lillian	Hamilton, Ohio
Richey, Margaret Cecelia, A.B. (Columbia), 1913	Wilmington, Del.
Rider, Frances	New York City
Riffle, Irene Starner	Corning
Riley, Edouard Maurice	Bellows Falls, Vt.
†Riley, Helen May	Pittsburgh, Pa.
Rinck, Katie May	Mahanoy City, Pa.
Rites, Marion Burhanse	Ithaca
Ritter, Viola Margaret	Pasadena, Calif.
*Roberts, Allan Norman	Potsdam
Robey, Helen Toores	Swarthmore, Pa.
Robfogel, Ella	Rochester
*Robinson, Elmina Curtice	Geneseo
*Robison, Ellis Howes, B.S. (Cornell), 1918	Schenectady
Rochow, Edna Florence	Lancaster, Pa.
Rodgers, Mary Catherine	Lewistown, Pa.
Rogers, Edna Mary	Hammond
Rogers, Louise Remington	Eastport
Rogers, Marian Eleanor	Darien
Rogers, Nellie Belle	Binghamton
Rohrbach, Walter Lynch	York, Pa.
Rometsch, William Henry, jr.	Philadelphia, Pa.
Romig, Florence Elizabeth	Ephrata, Pa.
*Rooney, Agnes Catherine	West Winfield
Rose, Anna Lorette, B.A. (Geo. Wash. U.), 1912	Mansfield, Pa.
Rosenbluth, Mathilde	New York City
Ross, Harriet Frances	Brentwood
Ross, Maud Lillian	Upland, Pa.
Ross, Mildred P. Margaret, B.S. (Elmira), 1918	Elmira
Roth, Irene Hayle	Maryd, Pa.
†Rothwell, Alice Ermina, B.S. (Elmira), 1914	Elmira
Rouse, Lester Mallory	Auburn
Rowland, Olive Lucile	Honesdale, Pa.
Rowlee, Silence	Ithaca
Rugh, Margaret Blanche	Salina, Pa.
Rumbley, Blanche	Chanute, Kan.
Russell, Dorothy Collins	S. Dartmouth, Mass.
*Russell, George Henry	Winthrop
Rust, Porter Edward	Ithaca
Ryan, Myra S.	Dunkirk
*Sackett, Jean Frances	Churchville
Sagerhohn, Christine Daisie	Crawfordsville, Ind.
†St. John, Emily Porter, A.B. (Elmira), 1890	Brooklyn
Sampson, Frederick William	Muncie, Ind.
Samson, Hector Bradford	Dunmore, Pa.
Sancton, Edna K.	Scranton, Pa.
Sandt, Louise Mildred	Portland, Pa.
Santee, Anne May	Cressona, Pa.
Sargent, Martha Augusta, A.B. (Mt. Holyoke), 1895	W. Boylston, Mass.
Saurman, Elizabeth Williams	Philadelphia, Pa.
Saxton, Anna Catherine	Lewistown, Pa.
*Schafer, Louis Herman	Le Roy
*Scheel, Mae	Flushing
Scheltz, Mathias George	Ithaca
*Schilling, Helen	New York City
Schmidt, Gertrude Katherine	New Brunswick, N. J.
Schnee, Vernon Higgs	Cleveland, Ohio
Schneider, Jerome George Frederick	New York City
*Schneiker, Frances, A.B. (Hunter), 1914	New York City
Schooley, Lora LeClaire, M.E. (Bloomsburg Normal), 1912	Berwick, Pa.
Schroder, Lillie	Brooklyn
Schwaninger, Mary Alice, A.B. (Western Md. Coll.), 1913	Trappe, Md.
Scott, Edith	Englewood, N. J.
*Seabring, Mrs. Lena (C. O.), Pd.B. (State Normal Coll.), 1895	Spencer

- Seep, Joseph, 2d
 Selee, Richardson
 Self, William Edward
 Sellers, Elizabeth
 †Serrano, Luis
 †Sewell, Dorothy Austin, A.B. (Smith), 1916
 Shannon, Margaret M. Delphine
 *Shantz, Mary Rickard
 *Sharp, Eva Mary
 Sharpe, Hazel
 Shaw, Laura Estelle
 Sheen, Margaret Jane
 Sheffer, Nancy Elizabeth, A.B. (Irving), 1917
 Sheldon, David Leslie
 Sheldon, E. Edwin
 *Shepard, Mary Bell Churchyard (Mrs), B.A. (Smith), 1913
 Sheppard, Ruth Connor
 *Sherman, Elsie Katherine
 *Sherwood, Laura Catherine
 Shultz, Laura Maude
 Siebert, Willard Wilson
 Silberman, Ethel
 Simons, Mayrant
 Simpson, Arthur Winfield
 Singleton, Edward Clary
 *Skivington, Elizabeth Mary
 *Slack, Anna Victoria
 Smart, Edythe Marion, B.S. in Ed. (Adelphi), 1918
 Smith, Alexander Keen
 Smith, Alger James
 Smith, Alpheus Waldo
 †Smith, Claire Marguerite
 *Smith, Clarence Evert
 Smith, Dorothy
 Smith, Edmee, (Mrs. J. A.), B.M., A.B. (Winthrop), 1917, 1918
 Smith, Fowler, B.M. (Columbia Sch. of Mus.), 1917
 Smith, Joseph Edward
 Smith, Marjorie Wilhelmina
 Smith, Martha Towne
 Smith, Rosabelle Gravatt
 Smith, William Anton, jr.
 Sogard, Mrs. Kate Taylor, A.B. (Vassar), 1892
 Solomon, Edward Lawrence
 Soule, Mary Laura
 †Southworth, Alice Lindsay
 *Spafford, Bessie Marguerite, B.S. (Cornell), 1916
 Spahr, Mary Burchard, A.B. (Wellesley), 1918
 Spath, Edna Marie
 Spink, Marion Cogswell
 †Staley, Frank Marcellus, A.B. (Atlanta Baptist Coll.), 1912, B.S.A. (Cornell), 1915
 Stashak, Frank John
 Steel, Robert Wenzig
 Stein, Mrs. Florence
 Steiner, Violet Catherine
 Stevens, Gertrude Aitken
 Stevens, Mildred Margaret
 †Stevenson, Elizabeth Snyder
 *Stevenson, Mabel, A.B. (Smith), 1900
 *Stewart, Elsie Reid
 Stewart, Harland Hubbard
 Sthare, Algetha Ellen
 Stillman, Lelia Clarine
 Stillwell, Lelya Chisholm
 Stivers, Mrs. Mary Newman
 Stokes, Hattie
 Storms, Ruth Estelle
 *Storrs, Will Carleton
 *Stout, Elizabeth Teresa
 Stover, Oscar Hayen
 *Stratton, Lucinda
 *Stratton, Ralph Orcutt
 Strauss, John Noble
 Strebel, Edna Fredericka
 Street, Alice Juliet
 †Strickler, Helen Miles, A.B. (Wilson), 1913
 Stroup, Effa Christina
 Stroup, Nathan Weller
 *Strowger, Jane Elizabeth
 Stuart, Lyman Knight
 Stude, Johanna Emilie, A.B. (Goucher), 1915
 Oil City, Pa.
 Harrison
 S. Orange, N. J.
 West Chester, Pa.
 Quito, Ecuador, S A.
 Walton
 Wilkes-Barre, Pa.
 Jordan
 Ithaca
 Clarks Summit, Pa.
 Duquesne, Pa.
 Cleveland, Ohio
 Milroy, Pa.
 Winsted, Conn.
 Annville, Pa.
 Ithaca
 Pittsburgh, Pa.
 Brooklyn
 Mount Kisco
 Bellevue, Pa.
 Pittsburgh, Pa.
 Brooklyn
 Summerville, S. C.
 Edgewater, N. J.
 St. Louis, Mo.
 Mumford
 Carthage
 New York City
 Philadelphia, Pa.
 Ithaca
 Ithaca
 Brooklyn
 Greene
 Ithaca
 Holly Hill, S. C.
 Boise, Idaho
 Durham, N. C.
 Honesdale, Pa.
 Ithaca
 Philadelphia, Pa.
 Baltimore, Md.
 Racine, Wis.
 Beaver Falls, Pa.
 Grand Haven, Mich.
 Brooklyn
 Moravia
 Princeton, N. J.
 Dillsburg, Pa.
 Attica
 Americus, Ga.
 Glen Lyon, Pa.
 Lansdowne, Pa.
 New York City
 Brooklyn
 Dundaff, Pa.
 Oswego
 Pittsburgh, Pa.
 Pittsburgh, Pa.
 Brooklyn
 Geneva
 Hazelton, Pa.
 Lost Creek, W. Va.
 Meridian, Miss.
 Cold Spring Harbor
 Crockett, Texas
 Ithaca
 Madrid
 Brooklyn
 Buffalo
 Tunesassa
 Clifton Springs
 New York City
 Buffalo
 Rochester
 Waynesboro, Pa.
 Xenia, Ohio
 Harrisburg, Pa.
 Rochester
 Newark
 Catonsville, Md.

Stuerm, Louise, E. C.	Philadelphia, Pa.
†Sullivan, Kathryn Genevieve	Brooklyn
Sullivan, Philip Lawrence	Springfield, Mass.
*Sun, Yu Faung Russell	Shanghai, China
Swan, Julia Dix	Ithaca
Swartz, Louise Hobbs	Frederick, Md.
*Sweeney, Ruth Elizabeth	Port Leyden
Sweet, Marjorie Eloise	New Kensington, Pa.
Swirbul, Leon	Mt. Vernon
Switzer, Alice Malcolm	E. Orange, N. J.
Syrkin, Marie	New York City
Tait, Sterling Lockie	Gouverneur
Taliaferro, Donald Francis	Topeka, Kan.
Tan, Shao-Fan	Tangshan, China
Tang, Chen-Long	Ithaca
Taylor, Bayard Eugene	Oak Park, Ill.
Taylor, Edward Winthrop	Chicago, Ill.
Taylor, Joseph Martin	Corry, Pa.
*Ten Eyck, Ethel Ava	Syracuse
Terescewitz, Joe	Wilkes-Barre, Pa.
†Terasse, Bertha Emma	Buffalo
Thalman, Wellington Albert, A.B. (Ellsworth), 1917	Radcliffe, Iowa
Thalman, William John	Radcliffe, Iowa
*Thomas, Clara Ida	Washington, D. C.
Thomas, Marie Ella	Cleveland, Ohio
Thomas, Robert Mathias	Joliet, Ill.
Thompson, Helen L. W.	Pittsburgh, Pa.
Thompson, Julia Atwood, A.B. (Mt. Holyoke), 1915	Oxford
Thompson, Sawyer	Brooklyn
Thomson, Margaret Edna, A.B. (Geneva Coll.), 1915	Walton
†Tiffany, Ruth Winureeta, A.B. (Juniata), 1917	Huntington, Pa.
Tillotson, Mabel Ida, A.B. (Cornell), 1911	Jamestown
*Tine, Mary Katharine	Lebanon, N. J.
*Titus, Hazel Jane	Prescho
Tobin, Jennie Elizabeth	Camden, N. J.
*Tobin, Olivia Anna	Buffalo
*Tompkins, Elizabeth Heydon	Albany
Tompkins, Karl Whitney	Peekskill
*Tonkonogy, Jeanne Josephine, B.A. (Hunter), 1903	Coney Island
• Tooke, Harriet Amy, B.M. (Syracuse), 1918	Solvay
*Touroff, Anna Bernard	New York City
Touroff, Lillian Eleanor	New York City
Townsend, Fanny Laney	Elmira
*Treselman, Dorothy	Armonk
Troeck, Martha Dorothy	Brooklyn
True, Mary Bowler, A.B. (Cornell), 1909	Troy
Ts'a, Sien Tsz	Shanghai, China
†Tubbs, Laura Melvina	Candor
*Tucker, Margaret Madeline	New York City
Tueller, Joseph Benjamin	Montpelier, Idaho
Turner, Helen May	Kingston
Tuthill, Margaret	Atkinson, N. H.
†Twinch, Minton Halsey	Newark, N. J.
Uslander, Susan Jean	Newark, N. J.
Vance, Ledcreich Stuart	Louisville, Ky.
Van DeMark, Nina Marie	Lockport
Van Denberg, Ferne Edna	Detroit, Mich.
Vandergrift, Gertrude, B.A. (Irving), 1916	Lancaster, Pa.
Vandevere, J. Lilian	Philadelphia, Pa.
Van Horn, Hallie Florine	Salem, W. Va.
Van Order, Ruby Mildred	Ithaca
Van Valkenburgh, Mary	Athens
*Van Vleet, Eva Augusta	Ovid
Van Vleet, Minnie Louise, A.B. (Elmira), 1912	Ithaca
Vande Walle, William Edwin	Rochester
Vickers, James Leonard	Huntington, W. Va.
Waddell, Mary Allington	Canandaigua
*Wagner, Mercelia, B.A. (Wellesley), 1917	Oneida
Waite, Virginia Frances	Huntingdon, Pa.
Waldo, Reginald	Campbell Hall
Wallace, Robert Gilles	Canton
Wallach, Sadie	Buffalo
†Wallenstein, Edna, B.A. (Hunter), 1918	New York City
†Walter, Berenice Violet	New York City
†*Walton, George Willever, Ph.B. (Lafayette), 1915	Myerstown, Pa.
Ward, Mary Armantine	Yeadon, Pa.

- Waring, Frances Willard
 Warner, Jennie Elma
 Waters, Annie Elizabeth
 Watson, Mary
 Weaver, William Abbott
 Webster, Andrew Thomas
 †Weeks, Dorothy Walcott, B.A. (Wellesley), 1916
 Wehe, Fred William
 Weiant, Warren Swift, jr.
 Welker, Elizabeth Marie
 †Wells, Elsa Gertrude
 Wentz, Elizabeth Heathcote
 Wentz, Mildred Gelvin
 Wenzell, Henrietta Hofmeister
 Wertman, Newton Huffman
 West, Randolph Cooper
 *Westervelt, Louise Ruth
 Weyneth, Margaret Helen
 Wheatley, Emma
 Wheatley, Laura Amelia
 *Wheaton, Harriette
 Whelan, Annie Margaret
 Whiddit, William Wall
 Whipple, Helen Katherine, A.B. (U. of Illinois), 1916
 *White, Jessie Campbell, B.S. (Columbia), 1915
 White, Karin Andreevna, A.B. (Vassar), 1915
 *Whitehead, Beatrice Bedell
 Whitlach, Ruby Orma
 Whittaker, Alice Edna
 Whittaker, Stella Elizabeth, Pd.B. (N. Y. State Coll.), 1892
 Wicker, Mildred Marie
 Wigsten, Ellen Cecelia, A.B. (Elmira), 1915; A.M. (Cornell), 1916
 *Wilcox, Alice Wilson, B.A. (Vassar), 1894; M.A. (Brown), 1909
 †Wilcox, Elizabeth Lee, A.B. (U. of Mich.), 1898
 Wilcox, Jean Curley, A.B. (Goucher), 1915; A.M. (Johns Hopkins), 1917
 *Wilder, Bertha
 Wilkins, Annabel
 Wilkinson, Agnes Ezell
 Willcox, Harry J., A.B., A.M. (Cornell), 1915
 Williams, Anne Mae
 Williams, Mrs. Marguerite Jennings
 Williams, George Henry
 Williams, Nannie Leader
 Williams, Sara Ann
 *Wilson, Mrs. Alice Thomson
 *Wilson, Elizabeth Sophia, A.M. (Columbia), 1913
 Wilson, Mildred Fay
 Wilson, Percy Suydam
 Wilson, Verna May
 Winter, James Henry
 *Winters, Edna Clara
 *Winters, William Englehardt
 Winterschied, Bertha May
 Wise, William Franklin
 Witherow, Augusta Bispham
 *Witter, Daniel Wellington
 Wohlsen, Helen Martha
 Wohlwend, William Charles
 Wolcott, Ruth
 *Wolf, Harold George
 †Wolfe, Edith M., A.B. (Cornell), 1903
 *Wolfe, Joseph Ernest
 Wolpert, Henry Donald
 †Wong, Nellie Choy
 *Wong, Zoen Yien
 Wood, Edgar Holmes
 Wood, John Scott
 Wood, Mrs. Una Cranston
 Woods, Ida
 Woods, Mary Elizabeth
 *Woolsey, Harriet Louise
 Workman, Roy Hiram
 Worley, Roberta F., Ph.B. (Denison U.), 1911
 *Wright, Callie Ethel, A.B. (Park Coll.), 1917
 *Wright, Grace
 Wright, Simeon Mather
 *Wunderlich, Winifred Gertrude
 Yokogawa, Tokisuke
 Young, Amy May
 †Young, Eva Crowe, A.B. (Grove City), 1916
- Sayre, Pa.
 Horseheads
 Oneonta
 Pittston, Pa.
 Wilkes-Barre, Pa.
 Evansville, Ind.
 Washington, D. C.
 Cincinnati, Ohio
 Newark, Ohio
 New Middletown, Ohio
 Greenport
 Hanover, Pa.
 Lewistown, Pa.
 Pittsburgh, Pa.
 Ashland, Ohio
 New Orleans, La.
 Oneonta
 Seneca Castle
 Cleveland, Ohio
 Cleveland, Ohio
 Atlanta
 Springfield, Mass.
 Utica
 Medina
 New York City
 Ithaca
 Campbell
 Verona, Pa.
 Margate, N. J.
 Woonsocket, R. I.
 Livonia
 Elmira
 New York City
 Jackson, Mich.
 Baltimore, Md.
 Ithaca
 Moorestown, N. J.
 Eufaula, Ala.
 Ithaca
 New Castle, Pa.
 Canastota
 Rochester
 Jacobus, Pa.
 Oskaloosa, Iowa
 Ithaca
 Churchville, Pa.
 Ithaca
 Glen Ridge, N. J.
 Ocean City, N. J.
 Greene
 Brant
 Batavia
 Rockaway, N. J.
 Washington, Ind.
 Narberth, Pa.
 Delhi
 Lancaster, Pa.
 Akron, Ohio
 West Hartford, Conn.
 Varysburg
 Pasadena, Calif.
 Ithaca
 Dunkirk
 Boston, Mass.
 Shanghai, China
 Rochester
 Brooklyn
 Harrisburg, Pa.
 Knoxville, Tenn.
 Pittsburgh, Pa.
 Utica
 Lititz, Pa.
 Oklahoma, Okla.
 LaPlata, Mo.
 Mayfield
 Belleville
 Geneva
 Tokio, Japan
 Bethlehem, Pa.
 Washington, Pa.

Young, George Bibb
 Young, Hiram Belding
 *Young, Ruth Arnott, A.B. (Wm. Smith), 1912
 Young, Ruth Marion, A.B. (Syracuse), 1916
 Youngs, Geneva Annette
 Zeeveld, Laurence Waleson
 Zeiner, Eugene Francis
 Zeller, Cornelia Pauline Hedwig, A.B. (Cornell), 1916
 Ziegler, Caroline Louise, A.B. (Goucher), 1907
 Zimmerman, Anne Elizabeth
 Zinssmeister, Helen Minnie

New York City
 New York City
 Ithaca
 Saco, Me.
 Warrensburg, Mo.
 Rochester
 Brooklyn
 Scranton, Pa.
 Baltimore, Md.
 Delaware, Ohio
 Herkimer

STUDENTS IN THE WINTER COURSES IN THE COLLEGE OF AGRICULTURE, 1918-1919

Abbott, Frances D.	Morrison, Ill.	McCall, Rhoda S.	Albany
Anderson, George F.	Antwerp	Mattern, Irene M.	Ithaca
Benjamin, Israel	Brooklyn	Mayer, Josephine J.	Brooklyn.
Berger, Walter R.	East Cleveland, O.	Metzger, Julian	Rochester
Blair, William M.	Greenwood	Minturn, Lawrence G.	Locke
Bowers, Calvin C.	Otselic	Moffett, Elsie W.	Mint Spring, Va
Bradner, Basil E.	Harrison	Nevin, Florence M.	Easton, Pa.
Chase, Arthur F.	Unadilla	Ogle, Robert C.	Valley Cottage
Chase, George E.	New York City	Phillips, Edward B.	Victor
Cross, Joseph T.	LaGrangeville	Pierce, Faith	Ithaca
Dimon, Abigail C.	Utica	Pope, Raymond	Sheepshead Bay
Dye, Harold R.	South Dayton	Price, Edwin C.	Tuckahoe
Eberhardt, John F.	Cassville	Quigley, Elizabeth B.	Endicott
Elnitsky, Anthon	New York City	Rattner, Solomon	New York City
Engel, Harry H.	Ithaca	Robbins, Bertram	New York City
Erle, Irvin L.	Dushore, Pa.	Robson, Edna H.	Ithaca
Fairbanks, Fred G.	De Ruyter	Rose, Aaron E.	Rochester
Fox, Cecil A.	Savona	Ross, Arthur E.	New York City
Gilmour, William E.	Schenectady	Ryan, William L.	Saranac Lake
Grant, Albert R.	New Milford, Pa.	Sanford, Clara E.	Bridgeport, Conn.
Gray, Clare G.	North Cohocton	Schafer, Milton B.	Dunkirk
Hammond, Alvin	Savona	Schuil, Rudy	Brooklyn
Hawley, Harriet L.	Ithaca	Scott, Edward H.	Copake
Hazle, Mayme H.	San Augustine, Tex.	Seely, Harleigh H.	LaFayette
Heredia, Antonio	Ithaca	Shea, John B.	Pottersville
Heverly, Leonard R.	Dushore, Pa.	Simon, Louise G.	Brooklyn
Hoecker, Adolph E.	Brooklyn	Slocum, Clifford R.	Warsaw
Humphrey, Herbert D.	Ira	Sprague, Howard L.	Dundee
Johnston, Jane	New York City	Sprague, Mildred	Liberty
Jolley, Vincent O.	Williamson	Stappenbeck, Arthur M.	Clinton
Jones, Charles A.	Mt. Holly, N. J.	Steiner, Walter H.	Brooklyn
Jones, Harvey E.	Moorestown, N. J.	Swift, Leon D.	Lake View
Jorgensen, Harold	New York City	Vasileff, Nicholas	New York City
Karpuk, Ilia G.	New York City	Veefkind, Theodore C. B.	Erieville
Kenney, Wallace	Elmhurst	Veness, Nellie M.	Hilton
Kokusho, Yoshio	Cleveland, O.	Ward, Edward	Wilkes-Barre, Pa.
Korotkin, Andrew F.	New York City	Weaver, Elsie T.	Ithaca
Lambert, Erwin A.	Philadelphia	Werner, Aline E.	Tarrytown
Lockwood, Burt A.	Buffalo	Wickes, Elizabeth	Ontario
Lockwood, Clarence N.	Buffalo	Wilcox, Frank A.	Harford, Pa.
		Wiltsey, Ruth E.	Hempstead
		Woodruff, Amy L.	Scranton, Pa.

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